RIDGE

LAND WEST OF BURGESS HILL (DPSC1)

Hearing Statement – Matter 4

September 2024

LAND WEST OF BURGESS HILL (DPSC1)

HEARING STATEMENT – MATTER 4

September 2024

Prepared for

Thakeham Homes Limited
Thakeham House
Summers Place
Stane Street
Billinghurst
West Sussex
RH14 9GN

Prepared by

Ridge and Partners LLP
Beaumont House
59 High Street
Theale
Reading
RG7 5AL

Tel: 0118 932 3088

1 INTRODUCTION

1.1.1. Ridge and Partners LLP (Ridge) act on behalf of Thakeham Homes Limited (Thakeham) in relation to the promotion of Land West of Burgess Hill, identified as DPSC1: Land to the West of Burgess Hill and North of Hurstpierpoint.

1.1.2. This Hearing Statement refers to Matter 4, as set out in the Inspector's Matters, Issues and Questions ("MIQs"). It supplements the submissions made during the Regulation 19 Consultation **(Doc ID[1] 1189800 and 1191735).**

[1] https://www.midsussex.gov.uk/planning-building/mid-sussex-district-plan/district-plan-2021-2039-site-allocations-evidence-library/

2 QUESTION 44

2.1 Is the Plan consistent with Circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development and paragraphs 104 - 109 of the Framework?

2.1.1 Thakeham/Ridge is of the opinion that the plan is consistent with Circular 01/2022 and NPPF paragraphs 104 – 109 if the modifications outlined in this statement (or similar) are included in the Plan:

- Moves away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes (vision-led approaches DfT Circular 1/22
- Seeks to identify which sites support local facilities and transport networks NPPF para. 135
- Prioritises pedestrian and cycle movements, and that well-considered parking, servicing and utilities infrastructure for all users is incorporated into development proposals NPPF para. 116
- Seeks to protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users NPPF para 104
- Considered transport from the earliest stages of plan-making and development proposals. NPPF para 108
- Identifies significant development in locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes NPPF para 109
- Takes account of differences in urban and rural areas in both plan-making and decision-making NPPF para. 109

DPSC1

2.1.2 Regarding DPSC1, the site identification, land assembly and proposed transport strategy have been developed via a vision-led approach (see **Appendix A** section 3 and Appendix B) and the transport proposals have been identified to create a high-quality place, connections to open space and to prioritise walking, cycling and public transport including (**Appendix A** section 6)

2.2 How has the Council considered transport issues from the earliest stages of plan making and development proposals particularly given that opportunities to maximise sustainable transport solutions may vary between urban and rural areas?

2.2.1 Thakeham has been working with MSDC and WSCC since the early stages of plan making (January 2022) to help develop a transport strategy to maximise sustainable transport

solutions for DPSC1, other allocations, committed/planned development and the existing community.

2.2.2 District-wide SATURN modelling undertaken by Systra on behalf of MSDC and published in January 2022 and then updated in September 2022 **(ID-T3).**

2.2.3 West Sussex Transport Plan 2022 to 2036[2] was adopted on 1st April 2022 and set out policies to help to move away from 'predict and predict' approach to a vision-led approach in Circular 01/2022 and with a greater focus on opportunities to promote walking, cycling and public transport use, in line with NPPF (para 108).

2.2.4 There has been workshops, meetings and data sharing demonstrating early planning to maximise sustainable transport solutions, including:

- March 2022 – Scoping Report issued to WSCC **(Doc ID 1189800)** April 2022 - Transport evidence Workshop (13th April 2022) - prior to the publication of the final LTP, significant site promoters were called to a workshop to understand the emerging LTP, the latest transport evidence and to encourage develop a collaborative approach to required mitigation and transport provision, particularly with regards to local living and sustainable transport to achieve a net zero carbon emissions by 2050.
- May 2022 - Preliminary Transport Review and Strategy **(Doc ID 1189800)**
- December 2022 - MSDC Transport Study Scenario 4 Review and Questions
- June 2023 – Data Collection (agreed with WSCC)
- July 2023 - Data Sharing with Science & Technology Park
- January 2024 - Preliminary Transport Strategy **(Doc ID 1191735)**
- February 2024 - Mid Sussex District Local Plan Significant Site Promoter Workshop - An update of the transport evidence was presented. Confirmation was given to moving to a vision based strategy (rather than Predict & Provide) and need for a collaborative transport strategy between nearby significant site promoters and transport operators.
- April 2024 - Transport Assessment Scoping Report (via Pre App with WSCC)
- May 2024 - Preapplication Meeting with WSCC
- May 2024 – Written Pre-Application response from WSCC (**Appendix A** Appendix D)
- September 2024 - Preliminary Transport Strategy and Assessment (**Appendix A**)

2.2.5 A distance-based approach to modeshift was applied in the Mid Sussex Transport Study in scenarios 5 and 6 **(ID-T6 to T10).** This will mean urban locations, which have higher proportion of shorter distance trips, due to the availability of a range nearby land uses and facilities, will reflect greater opportunity to shift to sustainable travel options. This particularly applies to the Land West of Burgess Hill (DPSC1). Rural locations, which have a greater proportion of longer distance trips to reach land uses and facilities, will reflect a lower level of sustainable travel use. These assumptions were based upon DfT Sustainable Travel Towns Study and the National Travel Survey data and was applied in the Crawley Transport Study for the 'Draft Crawley Local Plan 2021 – 2040' (due to be adopted October 2024) and Horsham

[2] https://www.westsussex.gov.uk/media/17428/wstp.pdf

Transport Study for the 'Local Plan 2039 Transport Assessment', which were both examined. Note: internalisation has also been accounted for where a range of land uses are provided on site.

DPSC1

2.2.6 Regarding DPSC1, **Appendix A** section 4 sets out the possible transport solutions, which will be refined at the future planning application stage.

3 QUESTION 45.

3.1 Following the Regulation 19 consultation on the Plan which is the subject of the examination, National Highways determined that due to potential severe impacts on the Strategic Road Network (the M23 and the A23) the Council would either have to a) consider a different pattern of growth; b) commit to significant highway improvements to the M23 and A23; or c) commit to a more ambitious package of sustainable transport, travel demand management and behaviour change measures and interventions accompanied by a robust 'monitor and manage' strategy and approach. What has been the Council's response to this?

3.1.1 Mitigation to focus on reducing traffic and to work with the three significant sites on their mobility strategies is confirmed in the July 2024 memorandum of understanding[3] with MSDC and NH **(ID DC17).**

3.1.2 The Travel Plan requirements outlined in the submission draft at page 108 state: "*Approved schemes will then be required to undertake and promptly report regular monitoring of travel movements in and out of site by all modes at all relevant access points, to enable enforcement of travel plan targets against agreed remedial actions. This is critical to successful implementation of a vision-led approach to spatial planning by ensuring suitable mechanisms are in place to respond, if necessary, as travel patterns change*".

3.1.3 The 'monitoring and remedial actions' within Travel Plans can deliver appropriate interventions to ensure a monitor and manage approach.

3.2 Are any consequential main modifications required to the spatial strategy, policies, and timing of delivery of development over the lifetime of the development plan?

3.2.1 Appendix 5 of the Local Plan should include a mechanism for funding/implementation of any shared and/or integrated sustainable transport, travel demand management and behaviour change measures and interventions to ensure a greater likelihood of success in reducing car dependency and therefore minimising risk of severe impacts of the highway network (referred to as **'Recommendation 1'** thereafter).

3.2.2 A Monitor & Evaluation Plan (or use of Travel Plan 'monitoring & remedial actions') should be required by future planning applications in Mid Sussex to manage car trips through investment in sustainable travel and avoid severe impact on the highway and to meet National Highway option c). (referred to as **'Recommendation 2'** thereafter).

[3] https://www.midsussex.gov.uk/media/ll1lluiy/dc17-national-highways-mou.pdf

4 QUESTION 46.

4.1 Is the transport evidence which supports the submission plan including any assumptions, such as home working rates, robust, justified, and is it consistent with national policy?

4.1.1 District-wide SATURN modelling was undertaken by Systra on behalf of MSDC **(ID-T1 to T10).** This type of model considers the impact of site allocations on the district as a whole and is a standard way of evaluating transport impacts at the Local Plan stage, however Circular 01/2022 para 15 recognises:

"that local planning and highway authorities need help when planning for sustainable transport and developing innovative policies to reduce car dependency. This includes moving away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes."

4.2 Home-working

Mid Sussex Transport Study (MSTS)

4.2.1 A 20% reduction for home working has been based upon Economic Growth Assessment extracts from the Northern West Sussex Economic Growth Assessment Focused Update for Mid Sussex (Lichfields March 2022.

Response

4.2.2 ONS[4] states that "Throughout 2022 the percentage of working adults reporting having worked from home has varied between 25% and 40%, without a clear upward or downward trend, indicating that homeworking is resilient to pressures such as the end of restrictions and increases in the cost of living."

4.2.3 Between 22 May and 2 June 2024, working arrangements among UK workers were as follows (ONS):

- *Only worked from home: 14% (compares to 38% in June 2020)*
- *Travelled to work and worked from home: 26%*

4.2.4 A 20% reduction appears reasonable and can be applied to both urban and rural developments.

[4] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkersgreatbritain/september2022tojanuary2023#:~:text=Throughout%202022%20the%20percentage%20of,in%20the%20cost%20of%20living

4.3 Internalisation

MSTS

4.3.1 To account for internalisation for Large Local Plan sites, primary schools have been allocated an 80% reduction on new primary school trip rates. Retail and Employment trips have also been allocated a 5% reduction in trip rates.

Response

4.3.2 This has been considered from first principles in **Appendix A** (section 5) and shows that internalisation at DPSC1 in the AM peak hour is 15% and is 8% in the PM peak hour. The difference is generally related to education trips in the AM peak hour. Table 1 shows that the residual vehicle trips are similar or lower from first principles than applied in the MSTS.

4.3.3 This can be applied to both urban and rural developments, if the rural developments deliver a range of land uses and facilities.

4.4 Modeshare

MSTS

4.4.1 Distance based mode shift has been applied based on a similar approach to that used in the Crawley and Horsham Local Plan evidence studies, which was derived from was derived from the DfT Sustainable Travel Towns Study and the National Travel Survey data.

4.4.2 An additional 1-2% reduction to trip rates has been applied to large and medium size Local Plan sites to account for the changes in the future of employment distribution. Sites considered as an urban extension (non-rural) have been allocated an additional 1% trip rate reduction as it is expected that existing services will benefit these new Local Plan development trips.

Response

4.4.3 A distance-based approach to modeshift was applied in the Mid Sussex Transport Study in scenarios 5 and 6 **(ID-T6 to T10)**. This will mean:

- urban locations, which have higher proportion of shorter distance trips, due to the availability of a range of nearby land uses and facilities, will reflect greater opportunity to shift to sustainable travel options.

- rural locations, which have a greater proportion of longer distance trips to reach land uses and facilities, will reflect a lower level of sustainable travel use.

4.4.4 For DPSC1, mode share has been considered from first principles and summarised in (**Appendix A** section 5). This has identified slightly fewer residual car trips than tested in the TSTS and are summarised in the table below.

Table 1 – Comparison of MSTS and Ridge PTS Residual Vehicle Trip Generation

Time Period	Direction	Car Driver Trips at Land West of Burgess Hill	
		Ridge PTS	MSTS
AM	Arr	133	143
	Dep	298	380
	2-W	**432**	**523**
PM	Arr	276	299
	Dep	151	157
	2-W	**427**	**456**

4.4.5 Overall the MSDC assumptions are therefore considered robust.

5 QUESTION 47.

5.1 Specifically, to what extent is the central tenet of the Plan, of 20-minute neighbourhoods and local living, justified, and effective in the context of a predominantly rural district and a development strategy which is to identify sites in areas which are to improve the sustainability of existing settlements including those falling within lower tier categories?

5.1.1 The Site Selection Methodology applied by MSDC assessed sites against a range of environmental, developability and accessibility criteria. The accessibility factors[5] were considered, including availability of public transport, access to main service centre, and distance to primary school, health centre and convenience retail.

5.1.2 Sites which include on-site facilities or can access such facilities within a 10-minute walk achieve a 'very positive' score against these criteria, with those greater than a 20-minute walk achieving a 'negative' score. MSDC used specialist mapping software "TravelTime" to determine the distance, most efficient route/method, and time taken. This is measured from the central co-ordinate of the site. The conclusions were included in the Site Selection: Conclusion's paper **(ID-SSP2)**[6]

20-Minute Neighbourhoods Guide (TCPA, March 2021) Section 4.3 provides advice on the application of the 20-minute neighbourhood idea to villages and rural areas which is either:

" 1. Rural Area with Market Town: the market town itself should become a complete and compact 20-minute neighbourhood. Although it is acknowledged that travel from nearby villages would occur, once in the market town, facilities that meet everyday needs can be found within walking distance.

2. Rural Area with Small Villages: supports the creation of a network of villages that collectively provide what most people need for their daily."

5.1.3 MSDC has applied these criteria with allocations in rural settlements delivering a range of facilities for the new and existing residents daily needs and the urban/urban extension settlement delivering new facilities and/or high-quality connections to existing facilities, depending on scale and location.

DPSC1

5.1.4 DPSC1 is located immediately west of Burgess Hill, which is a category 1 settlement with a comprehensive range of employment, retail, health, education leisure services and facilities. These settlements will also benefit from good public transport provision and will act as a main service centre for the smaller settlements.

5.1.5 There is significant opportunity to support the principles of a 20-minute neighbourhood at DPSC1. This is demonstrated in (**Appendix A** section 2.3).

[5] https://www.midsussex.gov.uk/media/je3pbxhl/site-selection-methodology.pdf

[6] https://www.midsussex.gov.uk/media/hsybcu2u/appendix-3-site-assessment-proformass.pdf

6 QUESTION 48.

6.1 What mechanisms would be required to achieve the proposed improvements set out within the individual allocations and would they be enough to prevent the transport impacts identified? Would the delivery of the sites be viable so as to be able to support the required mitigation requirements over the long term?

6.1.1 **'Recommendation 1'** and **'Recommendation 2'** outlined in response to question 45 would help prevent the transport impacts and improve viability.

6.1.2 Monitoring would begin at the start of a development. If trips start to increase above forecast, the developer would be advised that the trend needs to reduce. Additional measures could be introduced, and the travel plan intensified to reverse a possible breach.

6.1.3 An example is Alconbury Weald[7] - a development of 5,000 dwellings was broken down into smaller phases, Phase 1 comprising approximately 800 houses. The subsequent phase(s) of the development will be planned based upon the travel habits established on site.

6.2 Moreover, would these sites become genuinely sustainable, or given their locations, would they remain heavily reliant on the private car?

6.2.1 DPSC1 has demonstrated to offer significant opportunity to create a community that is not reliant on the private car, as set out in **Appendix A** (section 2.3).

[7] https://democracy.cambridge.gov.uk/mgAi.aspx?ID=27137

7 QUESTION 49.

7.1 National Highways is clear that RIS funding would not be available. What certainty is there that sufficient mitigation would be capable of being achieved either through the reduction of private car journeys or funded highway improvements?

7.1.1 **'Recommendation 1 and 2'** outlined in response to question 45 would improve certainty.

7.1.2 There are also some relatively lower cost highway improvements to Hickstead junction, which have yet to be delivered, such as:

- A planned improvement scheme has been designed by the Science & Technology Park (S&TP), as set out in Section 3 of the Statement of Common Ground 24th November 2020 (document reference SA9.10) including:
  - A23-A2300 Hickstead junction east and west
  - A23-A2300 Hickstead junction southbound merge
- Opportunity to extend the north bound off-slip lane south towards the footbridge. This could be considered to accommodate any vehicles queuing in the mainline.

7.2 How could the 'monitor and manage' approach be integrated into the Plan and how would it impact on its deliverability?

7.2.1 The requirement for a Monitoring and Evaluation Plan (or use of Travel Plan monitoring and remedial actions) for each development could be secured through S106 Agreement. The intention of these plans is to enable development to progress through uncertainty and to enable transport infrastructure and services to be delivered at the right time and on uptodate monitoring.

8 QUESTION 50.

8.1 Taken together, are the policies of the Plan including the site allocations and policies DPT1, DPT2, DPT3, DPI1, DPI2, DPI3, and DP18 justified, effective and consistent with national policy in relation to transport so as to avoid an unacceptable impact on highway safety?

8.1.1 DP18 should be amended to prevent the ability not to deliver sustainable transport investment required to achieve the targets set in Monitoring and Evaluation Plan or Travel Plan in DP18 (referred to as **'Recommendation 3'**). If this investment is removed for viability reasons, there would be greater risk of unacceptable impact on the highway.

8.2 Would they ensure that the residual cumulative impacts on the road network would not be severe?

8.2.1 These policies complemented with **'Recommendation 1 and 2'** outlined in response to question 45 would minimise the risk of severe impacts:

8.3 How would the Infrastructure Delivery Plan be effective in supporting the above policy requirements?

8.3.1 The Infrastructure Delivery Plan should include **'Recommendation 1 and 2'** outlined in response to question 45 to be effective.

APPENDIX A

RIDGE

LAND WEST OF BURGESS HILL

Preliminary Transport Strategy and Assessment

(Updated following WSCC's Preapplication Response)

September 2024

LAND WEST OF BURGESS HILL

Preliminary Transport Strategy

(Updated following WSCC's Preapplication Response)

September 2024

Prepared for

Thakeham Homes Ltd
Thakeham House
Summers Place
Stane Street
Billinghurst
West Sussex
RH14 9GN

Prepared by

Ridge and Partners LLP
Beaumont House
59 High Street
Theale
Reading
RG7 5AL

Tel: 0118 932 3088

Contact

Sarah Matthews
sarahmatthews@ridge.co.uk
Milena Martinez
milenamartinez@ridge.co.uk
01189 323 088

Version Control

Project Name: **Land West of Burgess Hill**

Project Ref: **5020385**

Report Title: **Preliminary Transport Strategy (Updated following WSCC's Preapplication Response)**

Date: **September 2024**

VERSION	DATE	DESCRIPTION	CREATED BY	REVIEWED BY
1	12/01/24	Working Draft for Client Review	MMG/DC	SM
2	26/01/24	Final Issue	MMG/DC	SM
3	22/08/24	Updated following WSCC Preapplication Response (Draft)	MMG	SM
4	13/09/24	Final draft	MMG	SM
5	16/09/24	Final	MMG	SM

Contents

Figures

Tables

Appendices

0 EXECUTIVE SUMMARY

0.1 Summary

0.1.1 This report has been prepared to support the allocation of the Land West of Burgess Hill residential development at Land West of Burgess Hill within the new Mid Sussex District Local Plan.

0.1.2 The proposed development site is located to the west of Burgess Hill, between Cuckfield Road and the A273 Jane Murray Way and just south of the A2300 and the Hub and Brookleigh (previously known as Northern Arc) developments. The proposals currently being considered are for approximately 1,350 residential dwellings, a primary school, and other on-site facilities including shops and community spaces.

0.1.3 The site offers excellent opportunity to deliver a smart, connected, sustainable and attractive new community given its proximity to the adjacent town, facilities and planned employment ('The Hub' and 'Science and Technology Park' on the A2300).

0.1.4 The site is connected to Burgess Hill and the local area by means of a comprehensive network of Public Rights of Ways and cycle routes that cyclists, pedestrians and/or equestrians can access. Additionally, Mid Sussex District Council (MSDC) and West Sussex County Council (WSCC) in partnership with Coast to Capital Local Enterprise Partnership, are delivering a package of sustainable transport improvements in Burgess Hill as part of the Place and Connectivity Programme, which includes:

- Enhancement of existing and new pedestrian and cycle routes within Burgess Hill, including both railway stations, town centre, and Victoria Business Park, and connecting with the wider area
- Bus infrastructure improvements, including enhancement to bus services and bus stop infrastructure.
- Cycle parking improvements at key recreational locations within Burgess Hill.
- Improvements to the A2300, including active travel improvements to encourage walking, cycling and wheeling along this key corridor.

0.1.5 The proposed transport strategy for Land West of Burgess Hill explained in **Figures 0.1 – 0.3** has been developed taking into account the proximity of the site to the local facilities and employment areas in Burgess Hill and availability of existing and potential active travel links and public transport services that could be used by residents. This strategy has been identified based upon discussions with the following parties and will likely evolve with ongoing discussions and assessment:

- Local developers: the Science & Technology Park and Sayers Common's developer and their transport consultants
- Transport operators: bus operators, car club operators and bike share/ cycle hire operators.
- Local planning and highways authorities: MSDC and WSCC.

0.1.6 This document has been updated in August 2024 to consider:

- the preapplication advice provided by West Sussex County Council (WSCC) in June 2024, in response to the 'Land West of Burgess Hill Transport Scoping Report' issued in April 2024. See response in **Appendix D**.
- discussions held with transport operators regarding the emerging Mobility Strategy for the site.

Figure 0.1 (larger scale at Figure 4.2) – Active Travel Links Map (with Indicative Bike Share Hubs)

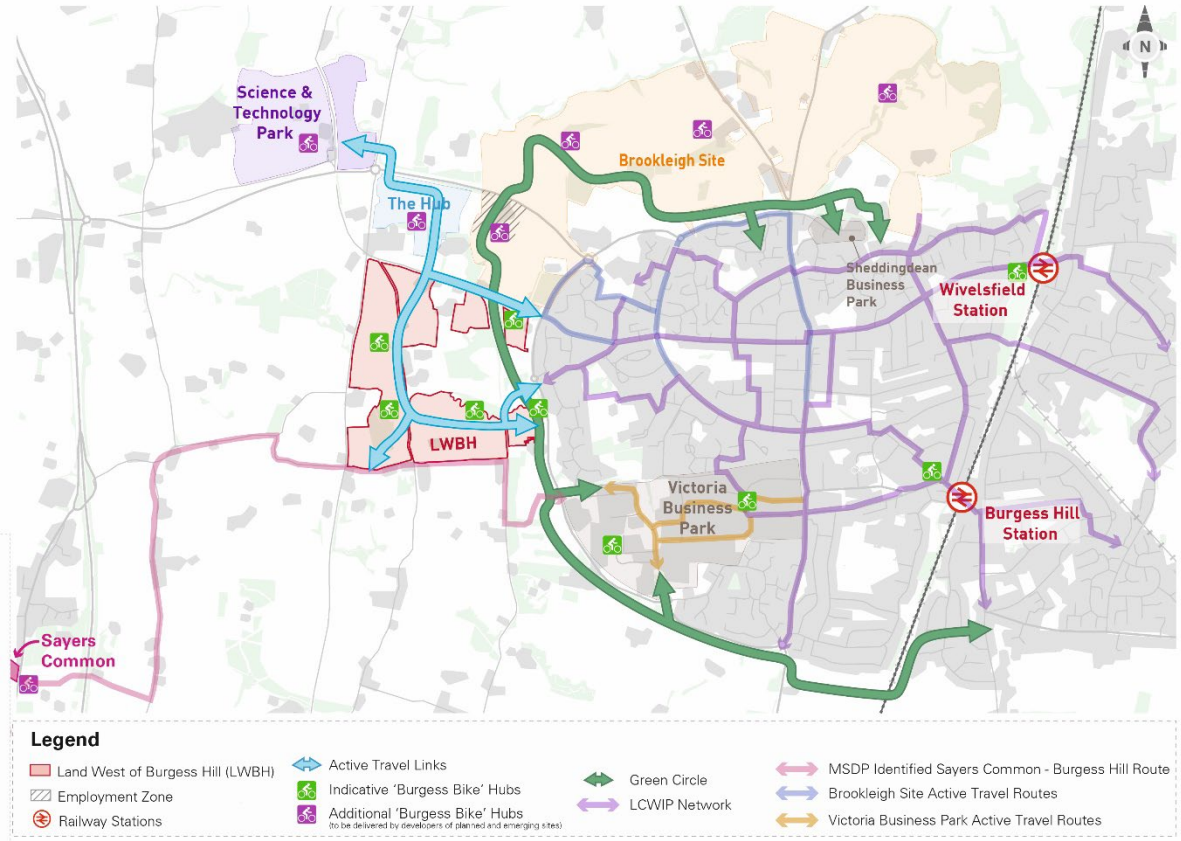


Figure 0.2 (larger scale at Figure 4.3) – Public Transport Plan

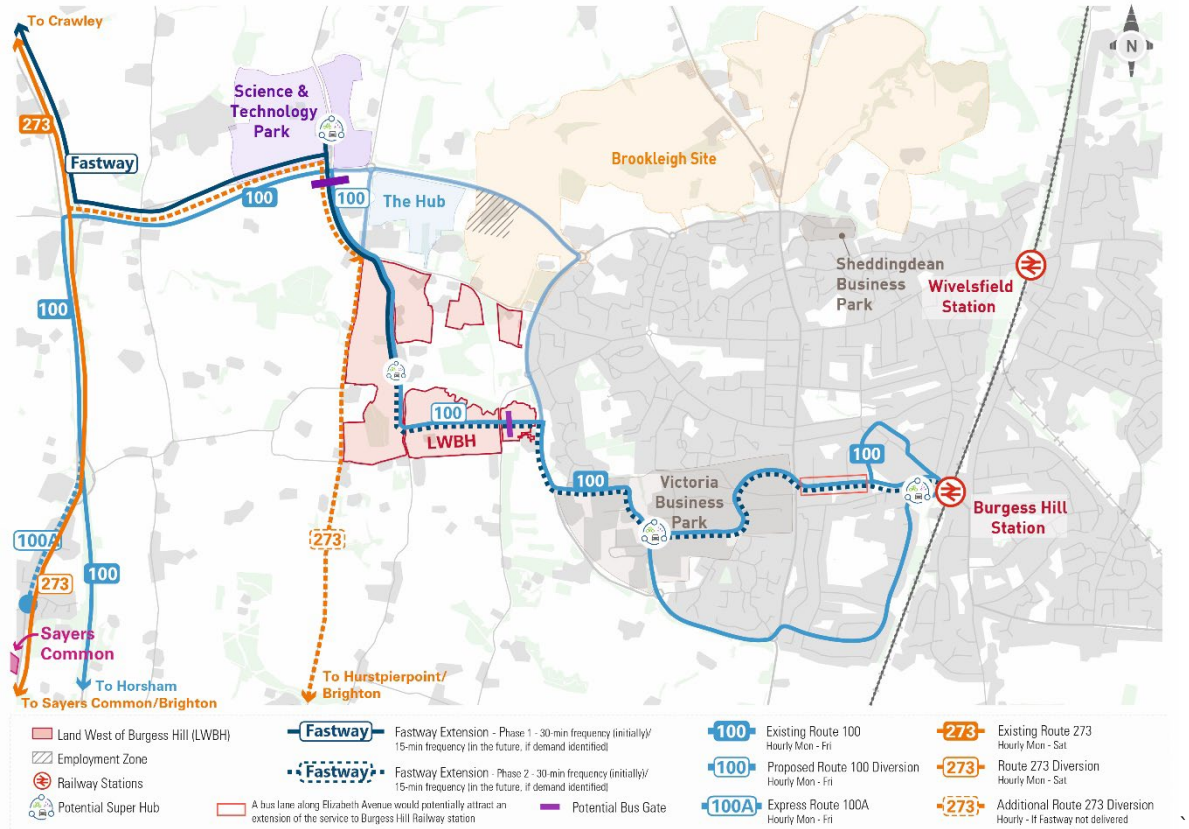
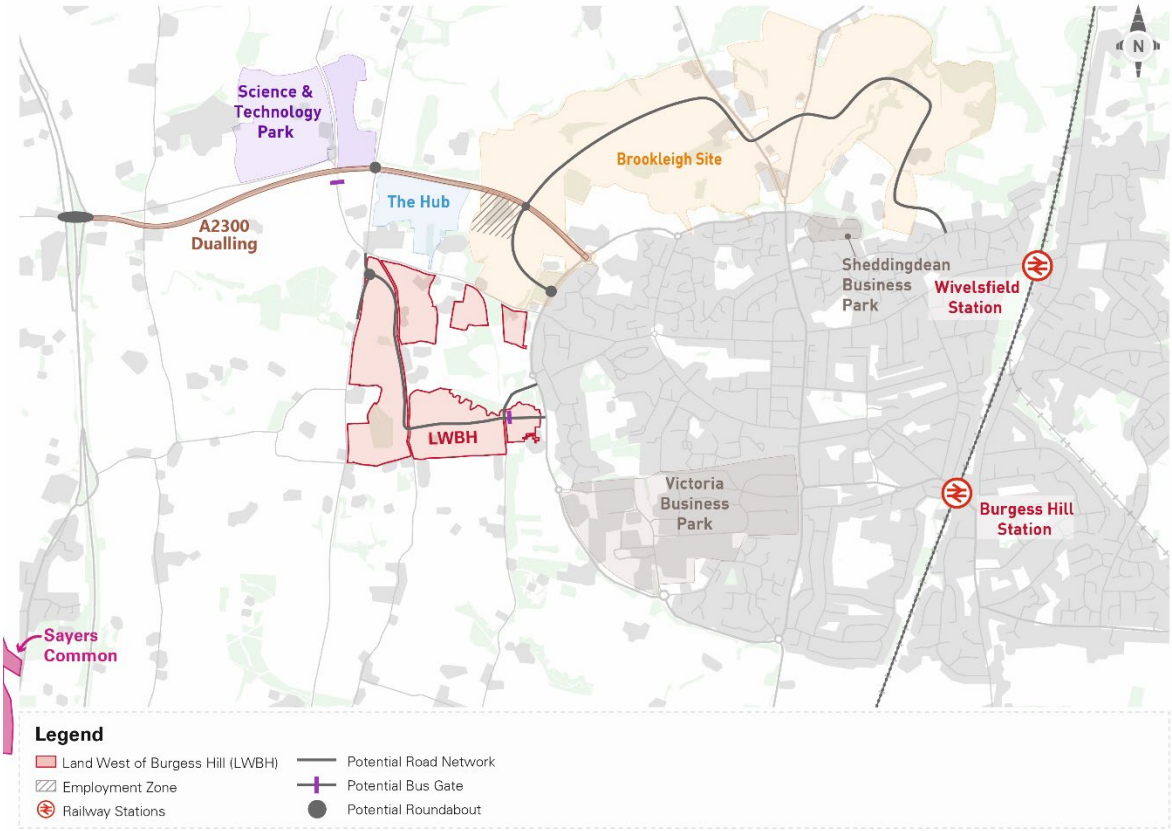


Figure 0.3 (larger scale at Figure 4.4) – Vehicle Access Strategy



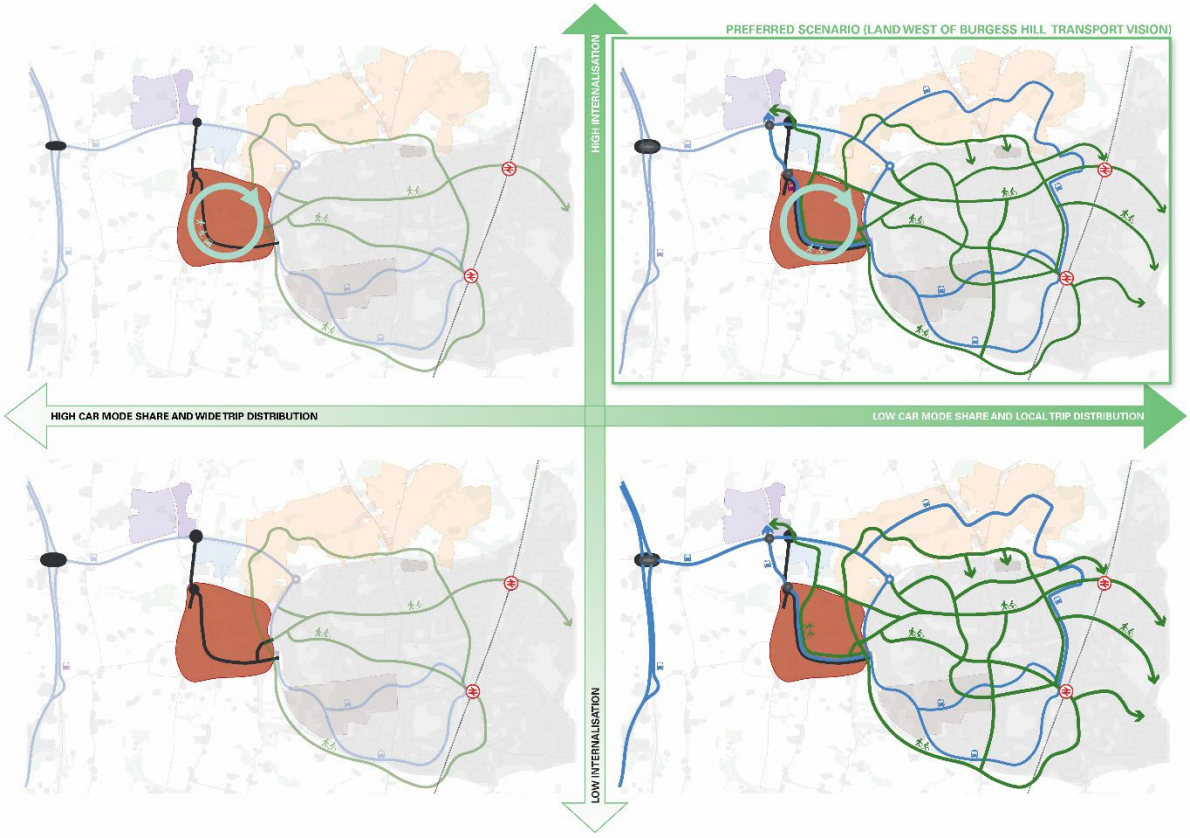
0.1.7 The proposed transport strategy would be supported by a package of measures and initiatives to encourage residents to make the most sustainable choice when travelling outside of the development, which could include:

- High-quality active travel infrastructure, including active travel links across the site connecting to Burgess Hill Town Centre and key destinations i.e. The Hub, Science & Technology Park.
- Public transport improvements, including the potential extension of Fastway to Burgess Hill and diversion of Compass Travel bus service 100 via LWBH, and/or the diversion of Metrobus service 273, if Fastway is not delivered.
- A 'Burgess Bikes' cycle hire scheme.
- Car Club, including provision of up to 13 car club vehicles at LWBH and/or other key locations
- Supporting measures including:
    - Integration of the Mobility Services outlined above (bus services, Burgess Bikes and car club), with:
        - l Mobility Hubs
        - Shared mobility app/ MaaS
    - Travel Plan management and monitoring
    - Monitor and Evaluation Plan (MEP)

0.1.8 Primary access for vehicles is proposed via a new access roundabout to be located to the south of the existing A2300/ Cuckfield Road roundabout and south of the Gatehouse Lane/ Bishopstone Lane. A new roundabout will connect with the existing Cuckfield Road to the north and south, with the eastern arm of the roundabout providing access to the site forming the primary street through the development.

0.1.9 The preliminary assessment of travel demand generated by residents of the proposed development has been carried out using a Vision-led approach. It is based around the idea of developing a comprehensive vision for the development (Land West of Burgess Hill Transport Vision) and identifying how transport infrastructure and services should contribute to deliver this. This approach is endorsed by the DfT and more recently incorporated in the National Planning Policy Framework (NPPF) July 2024 proposed changes (under consultation at the time of writing).

Figure 0.4 (larger scale at Figure 5.1) – Working Towards a Preferred Scenario



0.1.10 The preliminary travel demand assessment provides forecast travel demand for Land West of Burgess Hill and other growth. **Figures 0.5** and **0.6** show the forecast active travel demand and public transport demands respectively. This demonstrates significant opportunity for residents at Land West of Burgess Hill to travel by sustainable modes.

Figure 0.5 – Development Travel Demand – Active Travel Trip Desire Line Plots (AM)

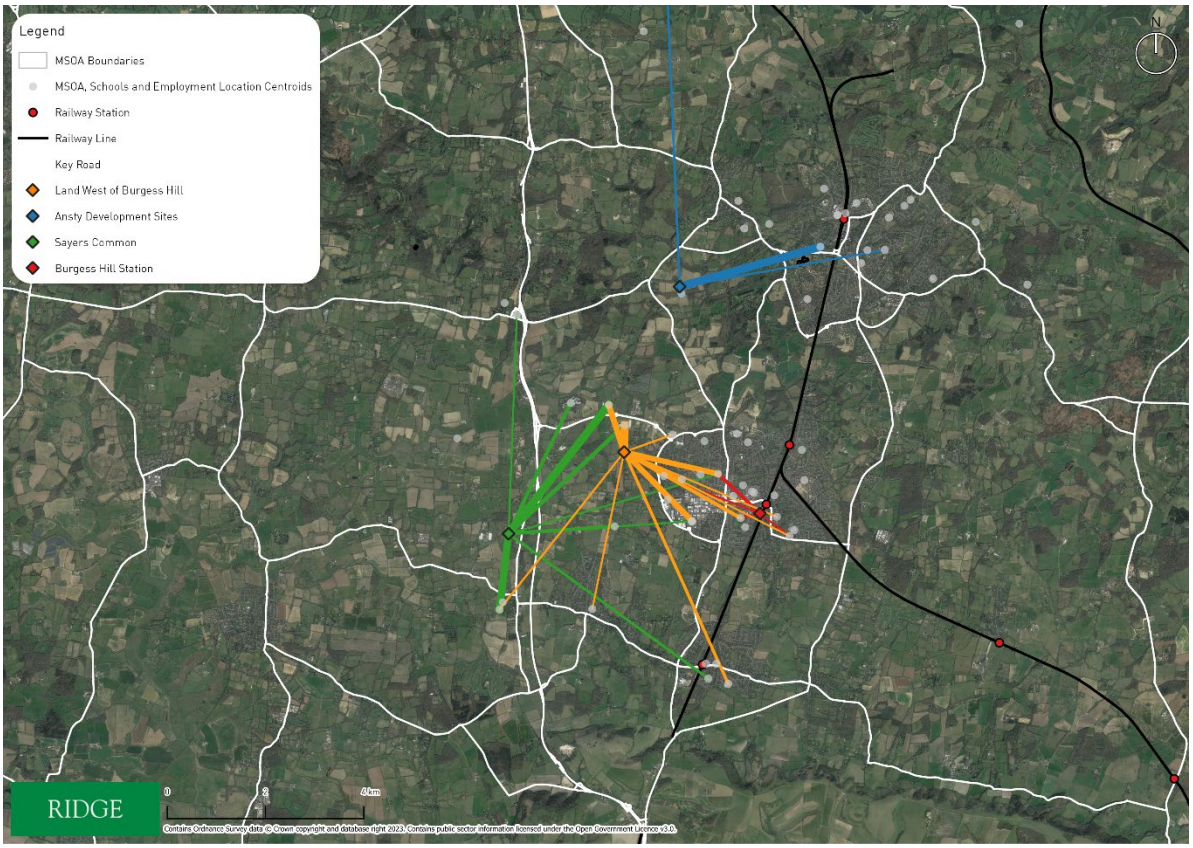


Figure 0.6 – Development Travel Demands – Public Transport Desire Line Plots (AM)

0.1.11 **Figures 0.5** and **0.6** demonstrate the opportunity for residents at Land West of Burgess Hill to travel by sustainable travel, particularly active travel. This has informed the development of the transport strategy, as outlined previously.

0.1.12 **Figures 0.7** and **0.8** show the forecast development traffic assignment to the highway network based upon existing peak hour travel times in the AM and PM peak hours. This demonstrates that there is minimal impact on the rural roads.

Figure 0.7 – OmniTRANS Assignment Plots (AM)

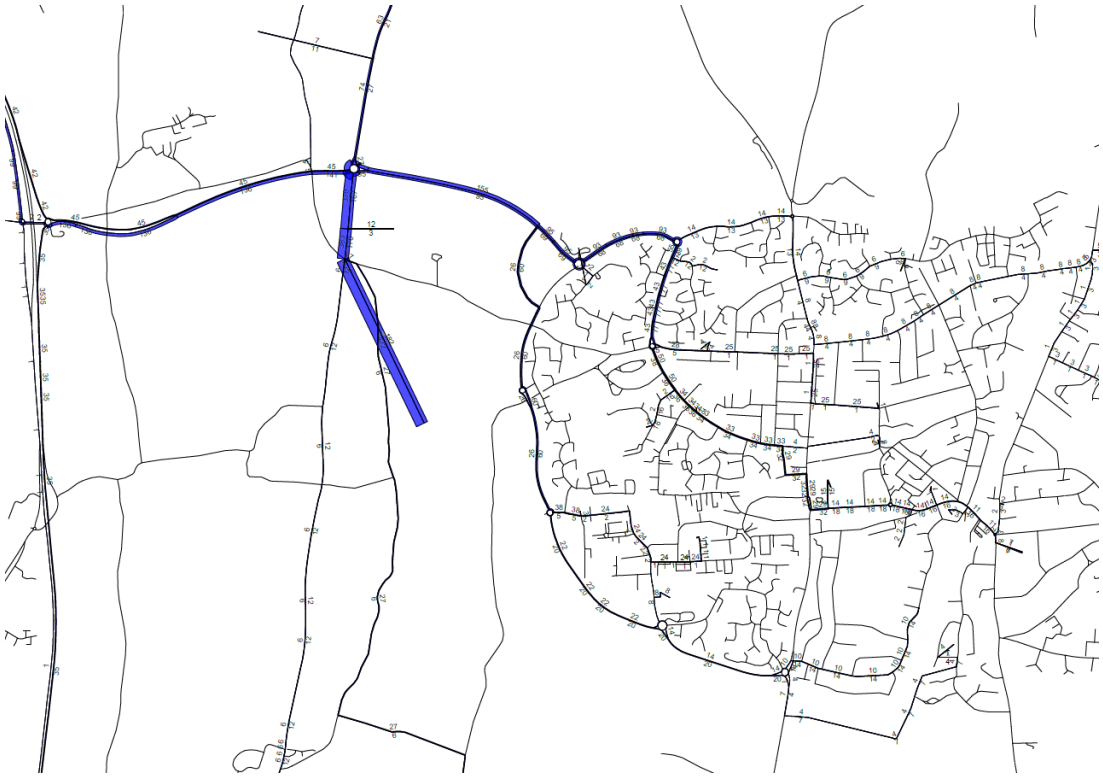
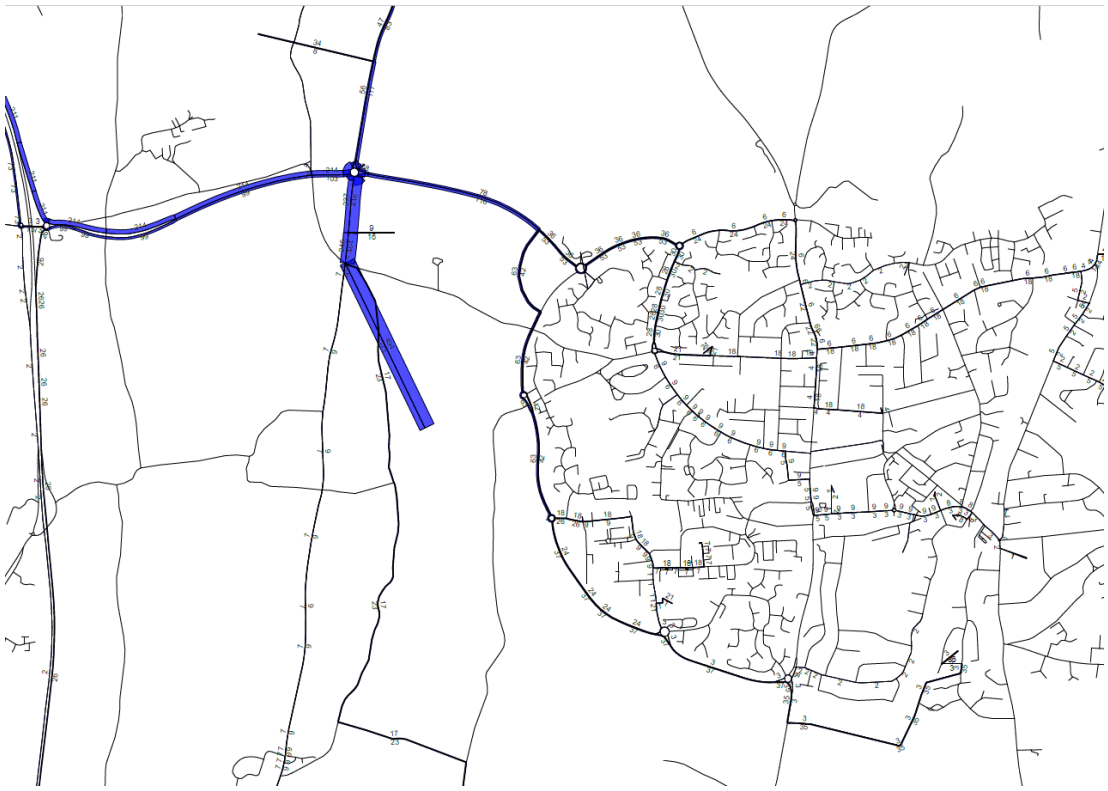


Figure 0.8 – OmniTRANS Assignment Plots (PM)



Conclusion

0.1.13 Land West of Burgess Hill Transport Vision is to create a new sustainable community, implementing the NHS Healthy New Towns principles, underpinned by the following principles:

- Healthy Living
- Sustainable Transport
- Homes for All
- Supporting Economic Growth
- Infrastructure Led
- Carbon Neutrality
- Biodiversity
- Education

0.1.14 Land West of Burgess Hill offers an excellent opportunity to deliver a smart, connected sustainable and attractive new community that can deliver Thakeham's vision to create a low-carbon development.

0.1.15 This preliminary Transport Strategy has been prepared to inform the Council's transport evidence to demonstrate how the development contributes or addresses the following:

Table 0.1 – Land West of Burgess Hill – Criteria and Policy

Criteria	Argument/ Conclusion	Strategic Objectives							District Plan Policies			
		1	5	6	8	9	12	14	DPS6	DPT1	DPT4	DPI1
Mix of uses and appropriate quantum to reduce the need for external trips and promote local living	✓ The site will include a primary school, and other on-site facilities including shops and community spaces and is in close proximity to The Hub, Science & Technology Park, Brookleigh, Victoria Business Park and Town Centre. Potential for a coordinated approach and collaboration with Brookleigh and Science & Technology Park to deliver high-quality placemaking which supports the 20-minute neighbourhood principles.	✓			✓ (local area)		✓		✓	✓		✓
Spatial framework to support compact & walkable communities & local living. Pedestrian and active travel priority and segregated design where possible	✓ The development will be designed to be compact and walkable with a comprehensive network of high-quality segregated walk and cycle links. Green travel corridors within the site will exploit the potential for High Hatch Lane as a pedestrian/cycle priority Quiet Lane and will integrate and enhance the existing ProW which cross the site. Potential to retain and enhance the historic routeways of High Hatch Lane and Pangdean Lane Potential to support delivery of a shared route with other allocated sites at Sayers Common and links to employment uses centred around the A2300 and Brookleigh.	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Connect to district wide active travel networks (LCWIP)	✓ The site network will connect into the wider active travel network including 'Green Circle'. The 'Burgess Bike' cycle hire scheme is proposed to help maximise the use of this network providing residents and visitors/employees access to peddle bikes and E-bikes (and potentially cargo and assisted bikes).	✓	✓	✓			✓	✓	✓	✓	✓	✓
Development densities and layouts to support effective and efficient public transport operations and access	✓ Opportunity to route bus services through the site to connect Science & Technology Park, The Hub, Land west of Burgess Hill to town centre and railway station.	✓		✓		✓	✓	✓			✓	✓
Flexible parking provision to support broader strategies	✓ There is flexibility in the delivery of parking provision with measures such as car share and liftshare available to reduce parking requirements, as well as investment in placemaking, active travel and public transport.	✓		✓							✓	
Move away from "Predict & Provide" design philosophy	✓ The strategy is based upon a more aspirational vision for the development, evidence has been provided as to how this could be achieved.	✓								✓	✓	
Rigorous scenario evaluations to support decision making low/medium/high public transport modal split	✓ At this stage a business as usual and a Land West of Burgess Hill Vision scenario have been tested. Furthermore aspirational and alternative scenarios will be considered at the next stage.	✓								✓	✓	
Maximise use of existing road capacity and transport services	✓ This development benefits from the investment made in the A2300 and planned public transport investment for The Hub, the Science & Technology Park, Brookleigh (previously known as Northern Arc) and the Place and Connectivity Programme	✓		✓							✓	✓
Combined Criteria	**Meets all 'transport related' strategic objectives and district plan policies**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Strategic Objectives

- 1 - Sustainable Development and Adaptation to Climate Change
- 5 - Create and Maintain Green Infrastructure
- 6 - Infrastructure to Support Sustainable Communities
- 8 - Opportunities to Live and Work within Communities
- 9 - Create and Maintain Town and Village Centres
- 12 - Support Safe, Healthy and Inclusive Communities
- 14 - Create Accessible Environments

District Plan Policies

- DPS6: Health and Wellbeing
- DPT1: Placemaking and Connectivity
- DPT4: Active and Sustainable Travel
- DPI1: Infrastructure Provision

1 INTRODUCTION

1.1 Overview

1.1.1 This report has been prepared by Ridge & Partners LLP on behalf of Thakeham Homes Limited to support the allocation of Land West of Burgess Hill for a residential development of approximately 1,350 homes within the emerging Mid Sussex District Plan (MSDP) 2021 -2039.

1.1.2 The MSDP 2021 – 2039 was formally submitted to the Planning Inspectorate in July 2024. The appointed inspected has indicated that the examination will be carried out in two stages, with the first stage starting in early October.

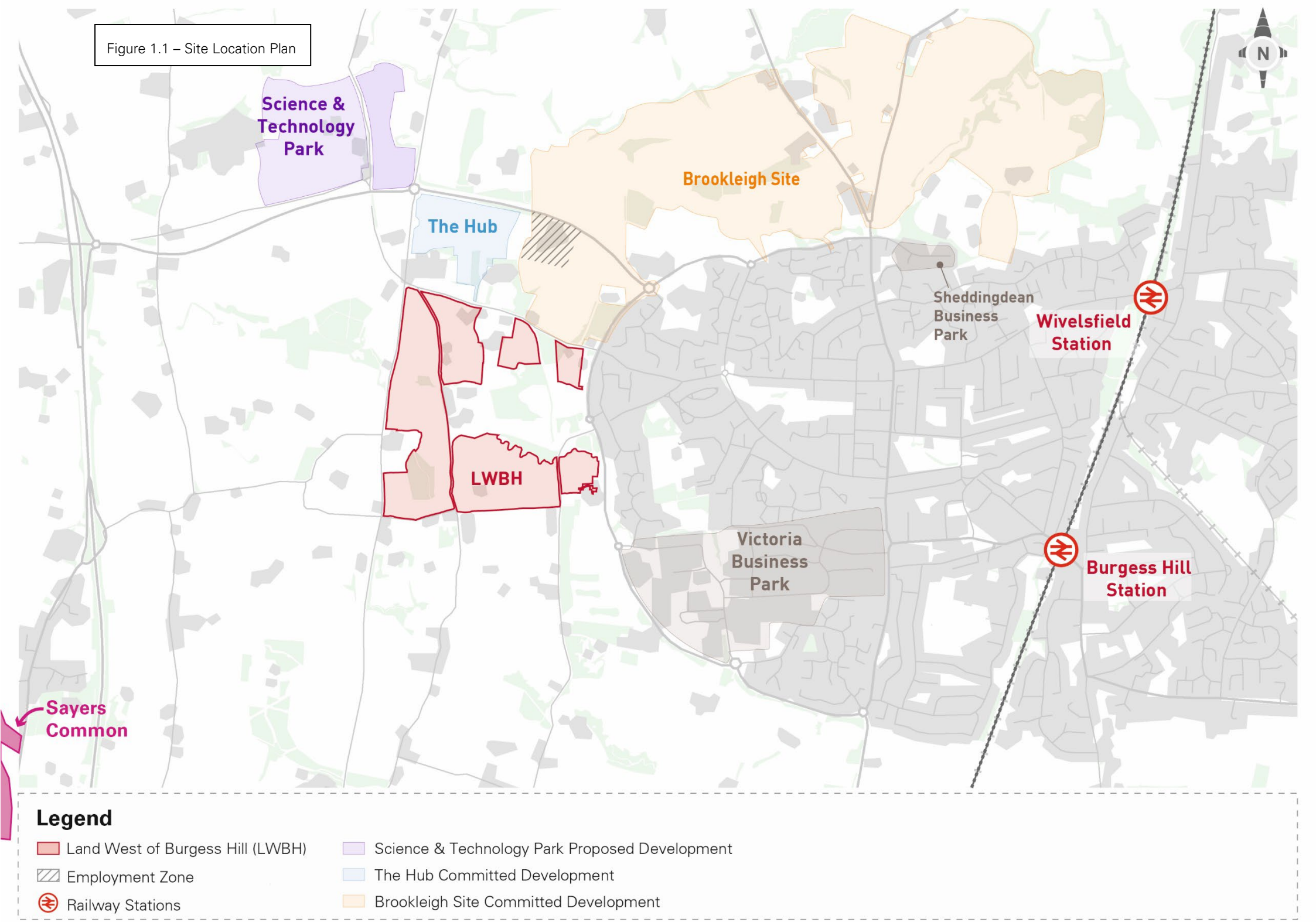
1.1.3 Policy 'DPSC1: Land to west of Burgess Hill/ North of Hurstpierpoint' identifies the site as an "area that is suitable for further sustainable growth, being well connected to existing and planned sustainable transport networks." The draft policy identifies the following at the site:

- 1,350 residential dwellings
- Land for education provision and associated 2FE Primary School with Early years and
- Support Centre Provision
- Space for the provision of full-day care nursery
- Self-service Library
- Neighbourhood centre – retail, leisure and workspace
- Local Community Infrastructure including allotments, public realm, public rights of way, cycle tracks
- Extra Care housing provision
- Play area
- Other outdoor provision including a MUGA
- Informal outdoor space including community orchards

1.2 Site Context

1.2.1 The proposed development site is located to the west of Burgess Hill, between Cuckfield Road and the A273 Jane Murray Way and just south of the A2300 and the Hub and Brookleigh (previously known as Northern Arc) developments. The proposals currently being considered are for approximately 1,350 residential dwellings, a primary school, and other on-site facilities including shops and community spaces. A plan showing the location of the site is presented in **Figure 1.1**.

Figure 1.1 – Site Location Plan



1.2.2 The site offers an excellent opportunity to deliver a smart, connected, sustainable and attractive new community given its proximity to the adjacent town, facilities and planned employment ('The Hub' and 'Science and Technology Park' on the A2300) and community sports area (The Triangle Leisure Centre and the community sports facility planned at Brookleigh, previously known as Brookleigh (previously known as Northern Arc).

1.3 Report Purpose

1.3.1 This report has been prepared to support the Vision and Deliverability Document for the site and updates and refines the assessment in line with National, Regional and Local Policy, including:

Selected National Policy, Strategies and Plans

- National Planning Policy Framework updated December 2023 and July 2024 proposed changes
- Transport Investment Strategy 2017
- Cycling & Walking Investment Strategy 2017
- Future Of Mobility: Urban Strategy 2019
- Transport Decarbonisation Plan 2021
- Net Zero Strategy: Build Back Greener 2021

Selected Regional Policy, Strategies and Plans

- Transport Strategy for the South East (2020, currently being updated)
- West Sussex Transport Plan 2022 – 2036
- Road Safety Framework 2016 – 2026
- Bus Strategy 2018 -2026
- Bus Service Improvement Plan 2022 – 2027
- West Sussex Walking and Cycling Strategy 2016 – 2026
- Electric Vehicle Strategy 2019
- Rights Of Way Management Plan 2018 -2028
- West Sussex Inter authority Air Quality Group: Breathing Better: A Partnership Approach To Improving Air Quality In West Sussex (May 2018)

Selected Local Policy and Plans

- Local Cycling and Walking Infrastructure Plan (2023)
- Mid Sussex Design Guide Supplementary Planning Document (SPD) (2020)

- Burgess Hill Place and Connectivity Programme

1.3.2 Mid Sussex District Plan (submission draft) explains that further growth identified within the Plan will be in accordance with the revised District Plan Strategy, which is based on the following four key principles:

i Protection of the High Weald AONB

ii Making effective use of land

iii Growth at existing sustainable settlements where it continues to be sustainable to do so

iv Opportunities for extensions, to improve sustainability of existing settlements

1.3.3 'Opportunities for extensions, to improve sustainability of existing settlements' directly applies to Land West of Burgess Hill, as an urban extension. The strategic objectives and districts that relate to transport proposals associated with this type of development are:

Strategic Objectives

- 1 – Sustainable Development and Adaptation to Climate Change
- 5 – Create and Maintain Green Infrastructure
- 6 – Infrastructure to Support Sustainable Communities
- 8 – Opportunities to Live and Work within Communities
- 9 – Create and Maintain Town and Village Centres
- 12 – Support Safe, Healthy and Inclusive Communities
- 14 – Create Accessible Environments

District Plan Policies

- DPS6: Health and Wellbeing
- DPT1: Placemaking and Connectivity
- DPT4: Active and Sustainable Travel
- DPI1: Infrastructure Provision

1.3.4 West Sussex Transport Plan vision and objectives are as follows:

"A West Sussex transport network in 2036 that works for communities in the Coastal West Sussex, Gatwick Diamond and Rural West Sussex economic areas by helping to address the spatial economic challenges of the County, level up the coastal economy and provide access to employment and services countywide.

The transport network will be on a pathway to achieve net zero carbon emissions by 2050 through more local living, increased use of electric vehicles and reduced use of fossil fuels. It will also be safer, more efficient and resilient overall with more walking, cycling and use of

public or shared transport and less congestion on major routes that connect West Sussex towns with Gatwick Airport, London and nearby cities.

The transport network will connect communities and allow residents to live healthy lifestyles with good access to the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour.

Active travel modes, public or shared transport will be attractive options in built up areas and between towns, and rural communities will have access to the services they need.

Transport impacts such as air pollution, noise and rat running on adjacent communities and the environment will be minimised to protect a quality of life that reflects the characteristics of the County."

1.3.5 This preliminary Transport Review and Strategy has been prepared to inform the Council's transport evidence to demonstrate how the development contributes or addresses the following:

Land Use & Spatial planning

- Mix of uses and appropriate quantum to reduce the need for external trips and promote local living
- Spatial framework to support compact & walkable communities & local living. Pedestrian and active travel priority, and segregated design where possible
- Connect to district-wide active travel networks (in line with the LCWIP)
- Development densities and layouts to support effective and efficient public transport operations and access
- Flexible parking provision to support broader strategies

Demand Analysis

- Move away from "Predict & Provide" design philosophy
- Rigorous scenario evaluations to support decision making low and high public transport modal split
- Maximise the use of the existing road capacity and transport services

1.4 Report Structure

1.4.1 The remainder of this report has been structured as follows:

- Section 2: Existing Transport Conditions and Sustainable Travel Options and Opportunities
- Section 3: Vision for the Development
- Section 4: Preliminary Transport Strategy
- Section 5: Preliminary Assessment of Travel Demand

- Section 6: Summary and Conclusions

2 EXISTING TRANSPORT CONDITIONS AND SUSTAINABLE TRAVEL OPPORTUNITIES

2.1 Introduction

2.1.1 This section provides a review of the existing transport conditions, available options for sustainable travel to/from Land West of Burgess Hill, as well as potential opportunities to increase sustainable travel.

2.2 Site Location

2.2.1 The proposed development site is located to the west of Burgess Hill, between Cuckfield Road and the A273 Jane Murray Way and just south of the A2300 and the Hub and Brookleigh (previously known as Northern Arc) developments.

2.2.2 Burgess Hill is located approximately 39 miles south of London and 10 miles north of Brighton and Hove. Other nearby towns and villages include Haywards Heath situated 1.5 miles to the north, Hurstpierpoint, Goddards Green, Ansty and Cuckfield. It is situated within the "Gatwick Diamond" between the major economic centres of Crawley (and Gatwick Airport) and Brighton and Hove.

2.3 Local Living

2.3.1 Land West of Burgess Hill is located at Burgess Hill, which is a category 1 settlement with a comprehensive range of employment, retail, health, education leisure services and facilities. These settlements will also benefit from good public transport provision and will act as a main service centre for the smaller settlements.

2.3.2 There is significant opportunity to support the principles of a 20-minute neighbourhood (see **Appendix B** para. B.1.15 onwards) at 'Land West of Burgess Hill.

2.3.3 Internal to the development will be a range of facilities:

- 1,350 residential dwellings
- Land for education provision and associated 2FE Primary School with Early years and
- Support Centre Provision
- Space for the provision of full-day care nursery
- Self-service Library
- Neighbourhood centre – retail, leisure and workspace
- Local Community Infrastructure including allotments, public realm, public rights of way, cycle tracks
- Extra Care housing provision
- Play area

- Other outdoor provision including a MUGA
- Informal outdoor space including community orchards

2.3.4 Nearby, within walking, cycle and/or via bus services, are a wider choice of jobs and facilities:

- Employment:
  - The Hub located 450m north of the site, which will deliver 1,500 jobs when completed, is located approximately 400m north of the site access.
  - The proposed Business Park at the Brookleigh (previously known as Northern Arc), approximately 1.7km northeast of the site and
  - Science and Technology Park, located 1.0km north of the site on the A2300, immediately northwest of the A2300/ Cuckfield Road roundabout to provide 2,500 jobs
  - Sheddingdean Business Park located 2.9km east of the site
  - Victoria Business Park located 3.0km southeast of the site
- Tesco Superstore: a large food store is located at the south-west of Burgess Hill just 1.7km from the site, as well various smaller stores within the town centre and suburbs.
- The Triangle leisure centre is located North-West of Burgess Hill only 900m from the site.
- The town centre located 2.5km east of the site,
- Three secondary schools are located in Burgess Hill:
  - St Paul's Catholic College on the A2300 north of site;
  - Downlands Community School
  - Burgess Hill Girls to the south west of Burgess Hill town centre.
- There are a number of GP surgeries within Burgess Hill. Princess Royal Hospital at Hayward Heath has an A&E department.
- Railway Stations - Burgess Hill benefits from two railway stations:
  - Burgess Hill (adjacent to the town centre)
  - Wivelsfield.
- Brookleigh (previously known as Northern Arc): will deliver approximately 3,500 homes, two primary schools, a secondary school, three mixed use neighbourhood centres with two standalone community facilities, leisure and community uses, health provision, significant formal and informal recreational space, and landscaped areas, a Centre for Community Sports, employment opportunities including an employment site and within mixed-use neighbourhood centres, a network of pedestrian and cycling routes, a public transport corridor.

2.3.5 A map showing the local facilities available within a 10 and 20 minute walking and cycling distance (walking and cycling isochrones) from the site (Local Living Map) is presented in

Figure 2.1. A table setting out the number of facilities within each isochrone is presented in **Table 2.1**.

Figure 2.1 – Local Living Map

LWBH Site Boundary

Railway stations

Isochrones

20min cycle

10min walk

20min walk

10min cycle

Facilities

Learning Facilities

Working Facilities

Caring Facilities

Care Homes

Sports and Leisure Centres

Doctors

Pharmacies

Living Facilities

Play and Outdoor Areas

Community Centres

Vets

Parks

Supplying Facilities

Shops

Supermarkets

Convenience stores

Post Offices

Enjoying Facilities

Pubs, Cafes and Restaurants

Libraries

Table 2.1 – Local Living Facilities within 10 minute walk, 20 minute walk, 10 minute cycle and 20 minute cycle

Social Function	Facility	10min walk	20min walk	10min cycle	20min cycle
Learning	Nursery/ Pre-School	1	1	2	2
	Primary School	1	2	2	14
	Secondary School	0	0	1	5
	All Through School	0	0	2	6
Working	Employment	0	2	5	5
Caring	Care Homes	1	2	2	3
	Sports and Leisure Centres	0	1	6	10
	Doctors	0	1	3	3
	Pharmacies	0	1	3	4
Living	Play and Outdoor Areas	1	1	2	3
	Community Centres	1	2	5	17
	Vets	0	1	3	4
	Parks	0	0	29	62
Supplying	Shops	1	1	1	2
	Supermarkets	0	1	2	5
	Convenience stores	0	0	6	21
	Post offices	0	0	2	6
Enjoying	Pubs, cafes and restaurants	0	1	10	45
	Libraries	1	1	1	4

2.4 Walk and Cycle Routes

Local Network

2.4.1 There are a number of footpaths and bridleways that transverse the site or provide connections to/from the site. There are existing walking and cycle routes that connect the development with Burgess Hill town centre, railway stations and existing employment areas.

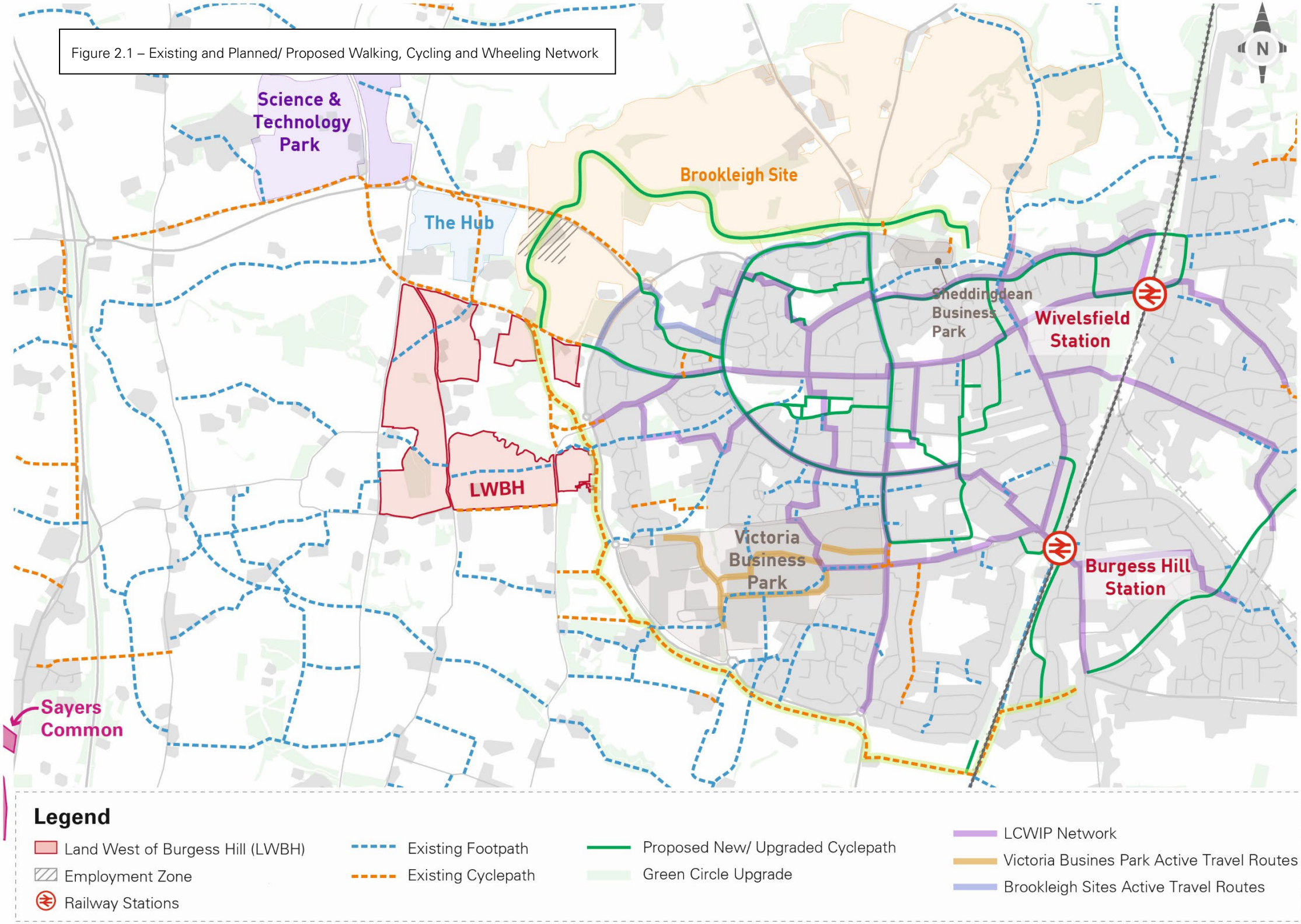
2.4.2 Burgess Hill's Local Cycle Network (LCN) consists of:

- A shared footway/ cycleway along the A273 Jane Murray Way, to the south of the town east of the Tesco roundabout, and along the A273 – London Road; and
- An on-road cycleway running in east-west direction between Job's Lane by the A2300 roundabout and Burgess Hill, along Job's Lane. Bishopstone Lane and Gatehouse Lane. This is shown in **Figure 2.1** overleaf.

Public Rights of Way (PRoW)

2.4.3 Burgess Hill is provided with a network of Public Rights of Way (PRoW) which cyclists, pedestrians, and horses/riders can access. These PRoW provide connections within and around Burgess Hill, including key locations such as Victoria Business Park, the town centre and railway stations. The "Green Circle" shown in **Figure 2.1** provides a segregated high-quality connection to these locations and runs along the outer side of the A273 adjacent to the site.

Figure 2.1 – Existing and Planned/ Proposed Walking, Cycling and Wheeling Network



2.5 Bus Services

2.5.1 The closest bus stops to the site are located on the A2300 (The Hub Bus Stops), to the north of the site, and A273 (Malthouse Lane bus stops), to the west of the site. These bus stops are served by the following services:

Table 3.1 – Existing Bus Services

Bus Stop	Bus service	Route	Frequency
The Hub / Malthouse Lane	100	Burgess Hill – Henfield - Steyning	Hourly
	2	Balcombe – Handcross – Burgess Hill	One per day

2.5.2 Bus service 273 runs along the A23 to the east of the site, providing one service every two hours between Crawley and Brighton.

2.6 Rail Services

2.6.1 The closest railway stations are Burgess Hill and Wivelsfield railway stations, which are located 3.1km and 3.2 km to the east of the site. The following services

Table 3.2 – Existing Rail Services

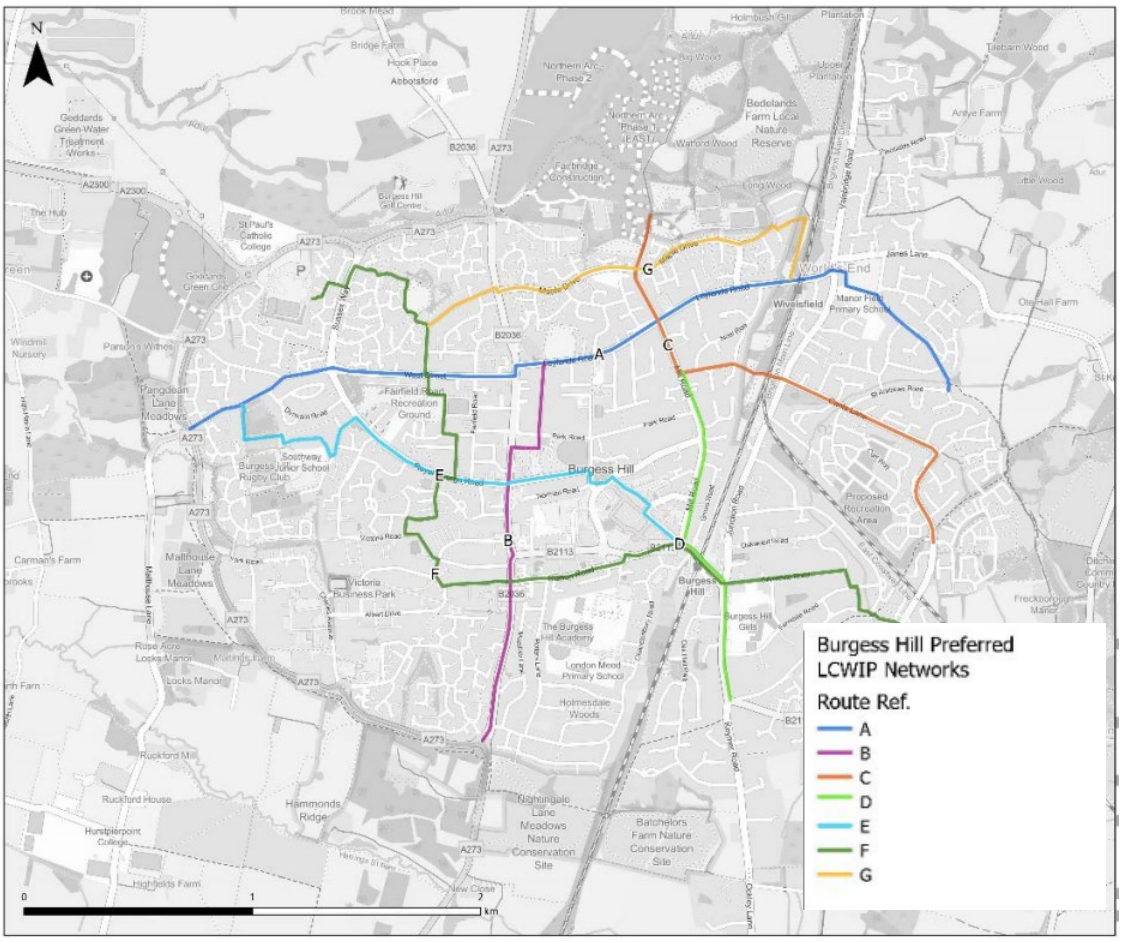
Operator	Route	Peak Frequency	Off-peak Frequency
Thameslink	Cambridge	Every 30mins	Every 30mins until 21:25, then hourly
	Brighton	Six per hour	Four per hour
	Bedford	Every 30mins	Every 30mins
	London Victoria (via Haywards Heath)	Every 30 mins	Every 30mins
Southern	London Victoria	Every 30mins	Every 30mins
	Littlehampton	Every 30mins	Every 30mins
Gatwick Express	Brighton	Every 30mins	Every 30mins

2.7 Planned Infrastructure

MSDC Local Cycling and Walking Infrastructure Plan

2.7.1 The MSDC LCWIP report published in March 2023 identifies where investment in new active travel infrastructure should be provided within the areas of Burgess Hill, East Grinstead and Haywards Heath. The following LCWIP Network was identified in the report:

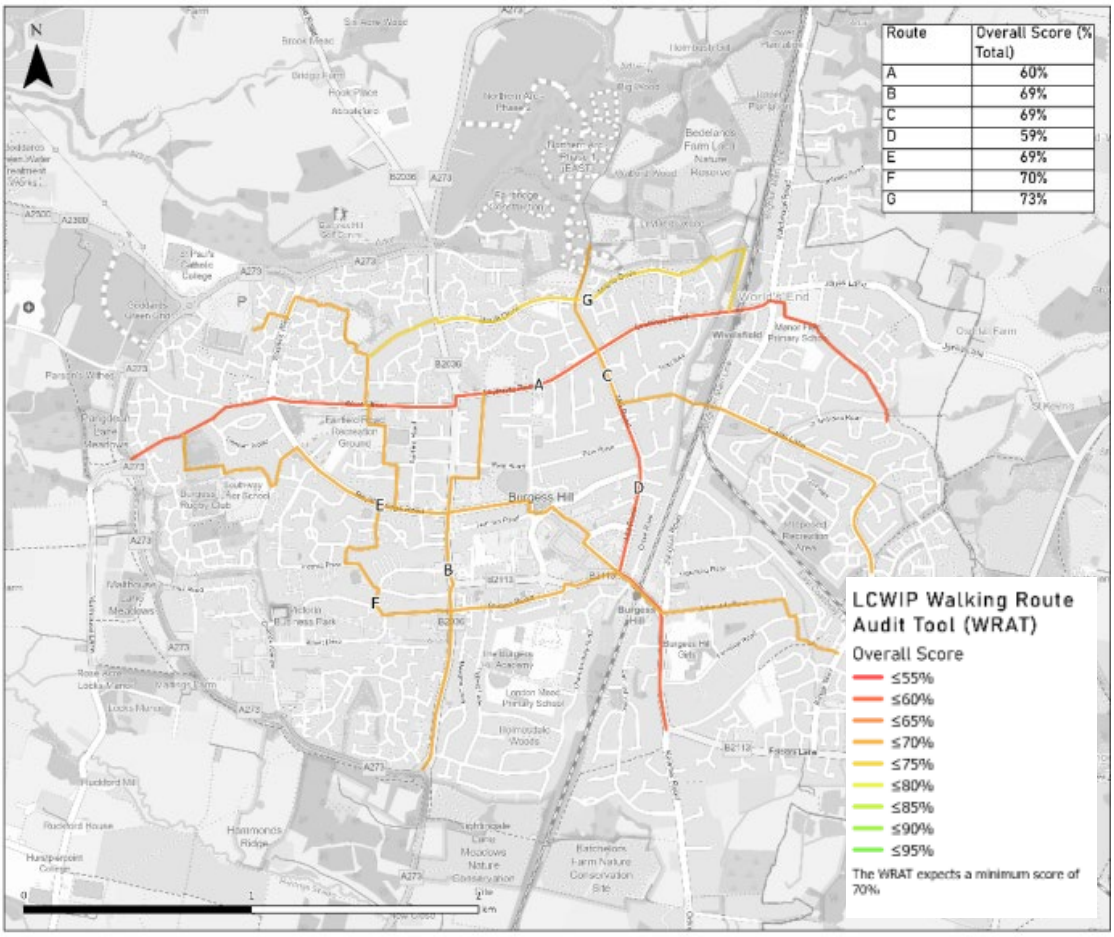
Figure 2.2 – Burgess Hill Preferred LCWIP Network



Source: Mid Sussex District Council Local Cycling and Walking Infrastructure Plan (LCWIP), March 2023

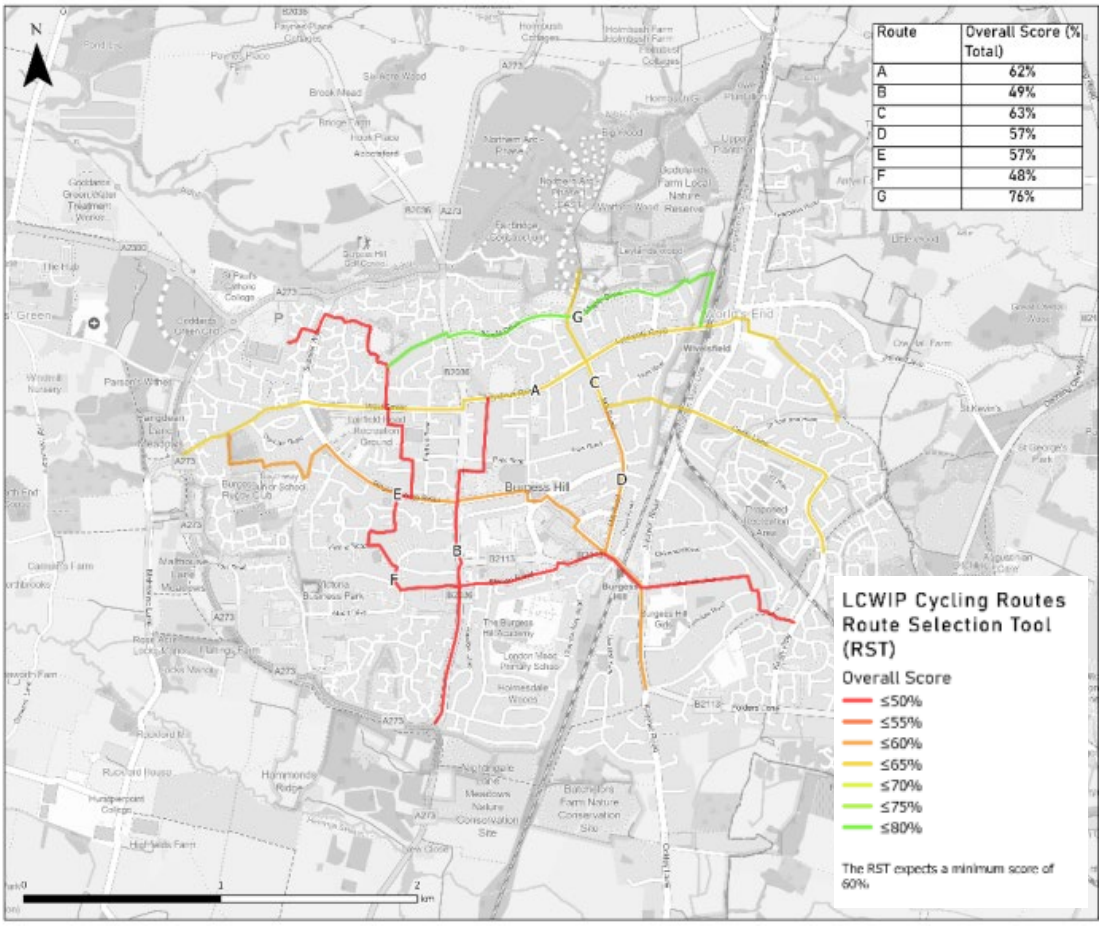
2.7.2 The above routes have been scored against walking and cycling criteria set out in the LCWIP guidance (DfT, 2017) and recommendations were made for the following stages of the LCWIP. The walking and cycling scores are as follows in **Figures 2.3** and **2.4**.

Figure 2.3 – Walking Routes Scores



Source: Mid Sussex District Council Local Cycling and Walking Infrastructure Plan (LCWIP), March 2023

Figure 2.4 – Cycling Routes Scores



Source: Mid Sussex District Council Local Cycling and Walking Infrastructure Plan (LCWIP), March 2023

Burgess Hill Place and Connectivity Programme

2.7.3 Sustainable transport improvements in Burgess Hill are being delivered by MSDC and WSCC in partnership with the Coast to Capital Local Enterprise Partnership (LEP) through the Place and Connectivity Programme. These are a package of projects aimed at creating safe, direct and attractive walking, cycling and wheeling routes and high-quality public spaces to encourage people to choose to walk, cycle and use public transport.

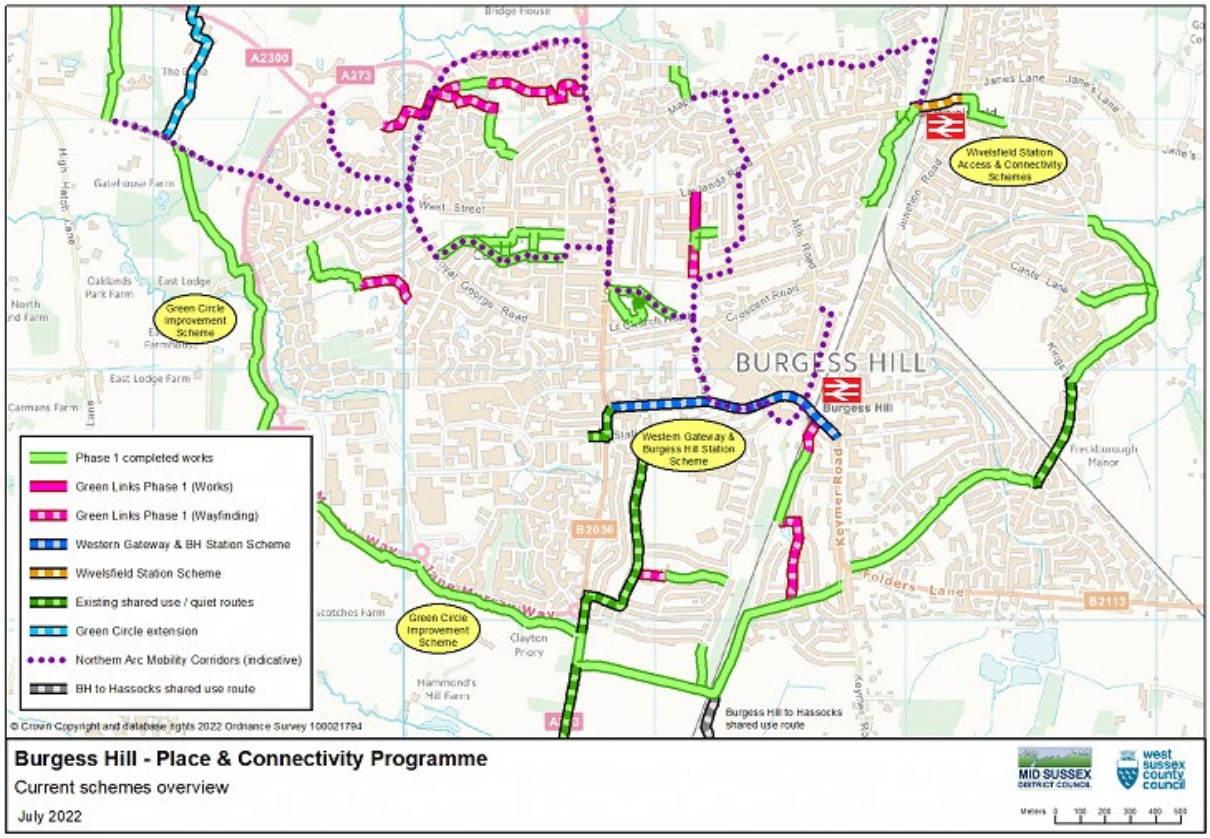
2.7.4 The Programme is part of and designed to support the Burgess Hill Growth Programme with the aim that Burgess Hill grows sustainably and looks to reduce congestion, increase travel choice, and improve journey times.

Figure 2.5 – Place and Connectivity Programme Improvements

Source: https://www.burgesshill.net/transport/sustainable-transport/public-engagement-may-june-2020.html

2.7.5 The programme is currently under its final stage of construction.

Figure 2.6 – Place and Connectivity Programme – Current Scheme Overview

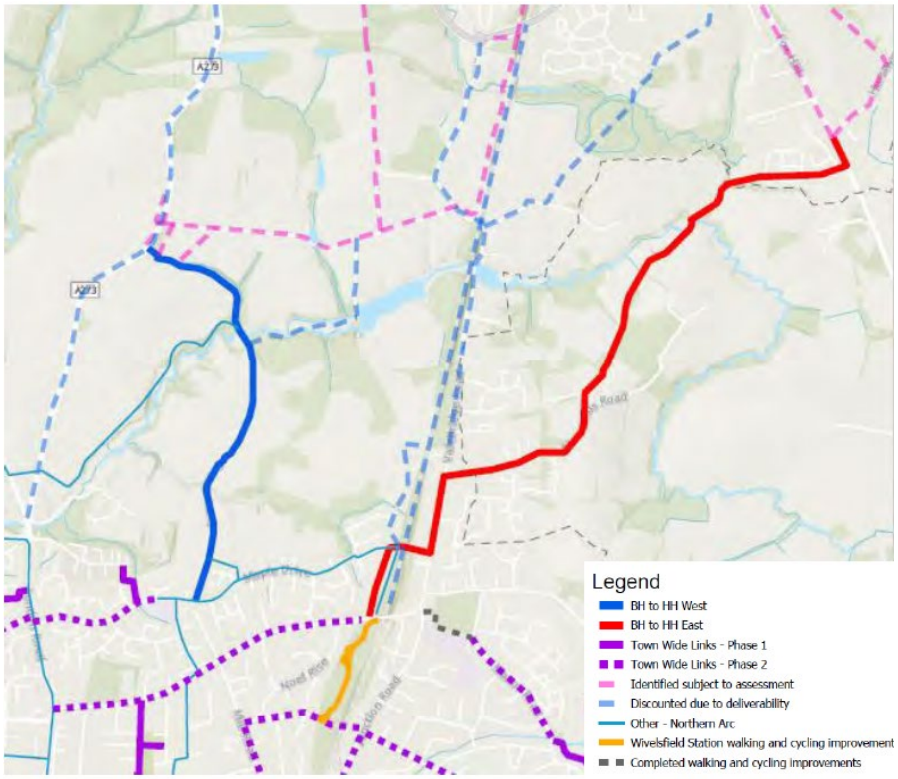


Source: https://www.burgesshill.net/transport/sustainable-transport

1. Burgess Hill to Haywards Heath

2.7.6 Transport improvements include enhanced pedestrian and cycle routes on both sides of the Brighton mainline railway to be delivered within current highway boundaries and along the routes existing PRoWs, including the Eastern Greenway Route (shown in red below) and the West Greenway Route (shown in blue):

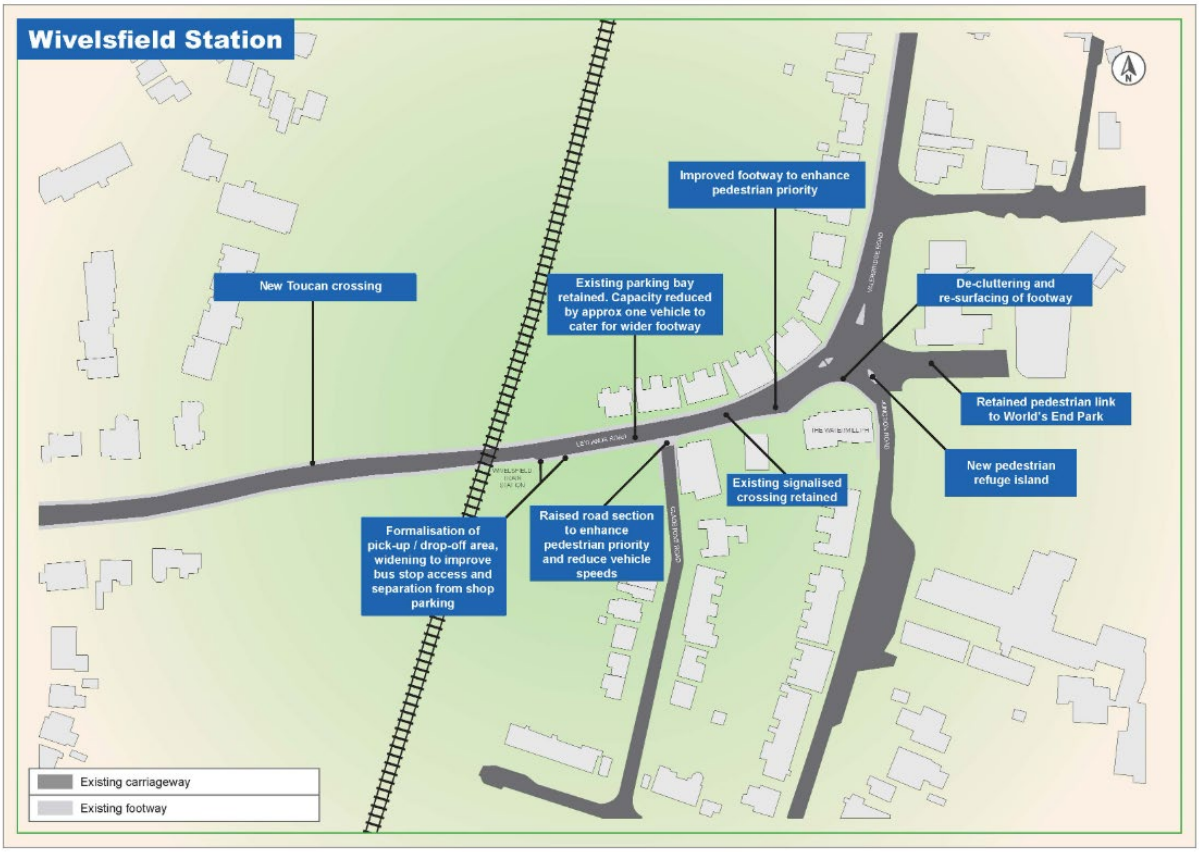
Figure 2.7 – Burgess Hill to Haywards Heath Greenways Plan



2. Wivelsfield Railway Station Area

The scheme was completed in 2020 to provide pedestrian and cycle access arrangements that link the Wivelsfield railway station with existing traffic free routes between Junction Road and St. Wilfrid's Road, additional safe cycle storage, pedestrian and cycle crossings at the Gladstone Road side road junction and enhancements to the public realm, i.e. improved lighting, repair of walls and public art.

Figure 2.8 – Wivelsfield Station Completed Scheme



3. Burgess Hill Railway Station Area

The proposals compromise pedestrian and cycle improvements to facilitate safe and secure movements to and from the Burgess Hill Railway and link the station area with Keymer Road, Church Road and Station Road. The scheme includes a pedestrian and cycle crossing on Station Road and a replacement of the current Station Road/ Church Road mini-roundabout with a signal-controlled junction that provides safe and convenient pedestrian and cycle routes to Burgess Hill town centre.

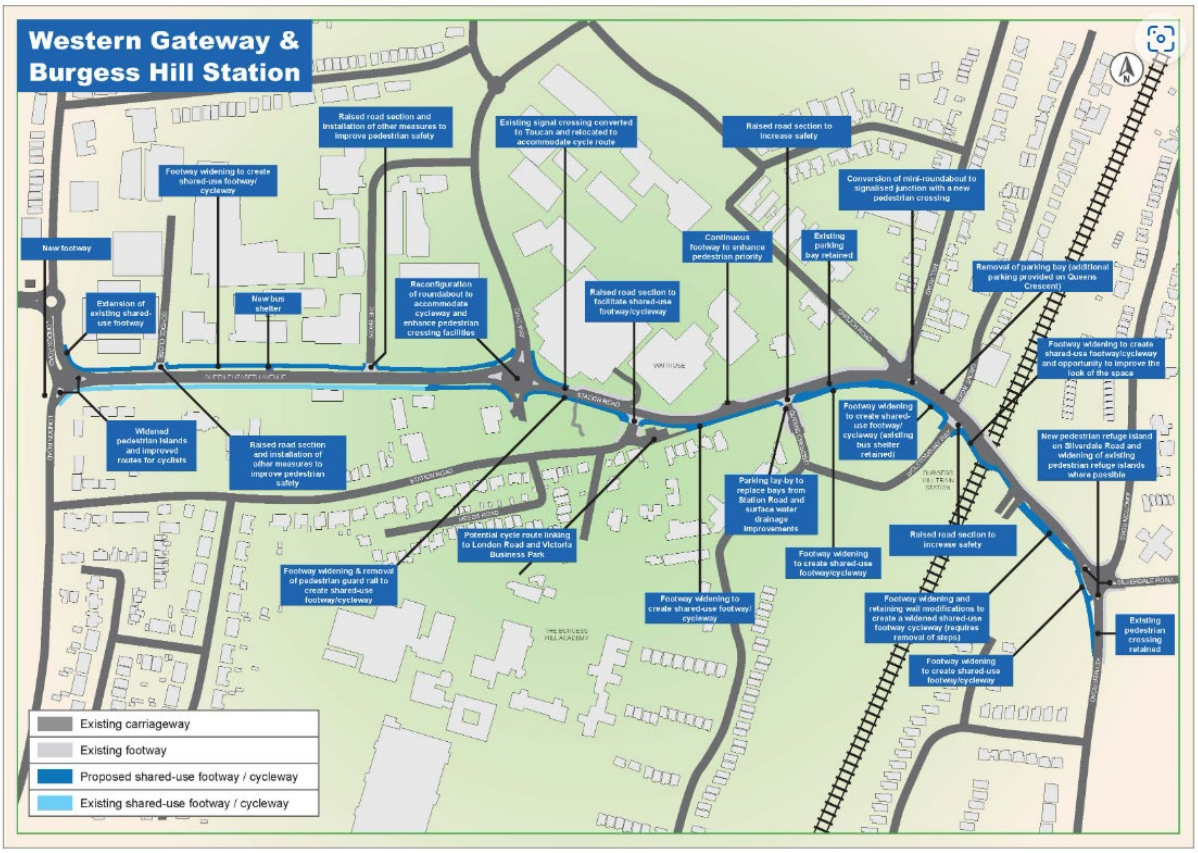
4. Burgess Hill Town Centre – Church Road/ Church Walk

The scheme was identified due to safety issues along the corridor that forms the main spine through the town centre, i.e. visual clutter and poor public realm. Proposals involve clear and safe junctions, crossing points and connectivity with the wider area. This was subject to public engagement in May and June 2020.

5. Town Centre – Western Gateway

This corridor links the town centre with the west, Burgess Hill railway station and links to the north from the emerging Brookleigh (previously known as Northern Arc) development. Improvements include widening of the pedestrian refuge points at the London Road junction enhancing pedestrian and cyclist crossing, widening of the Queen Elizabeth Avenue to provide a shared pedestrian/ cycle route and ensure continuity with routes proposed on London Road and link west to the Victoria Business Park and beyond. The proposals seek to enhance pedestrian and cycle access through this key transport corridor. This was subject to public engagement May – June 2020.

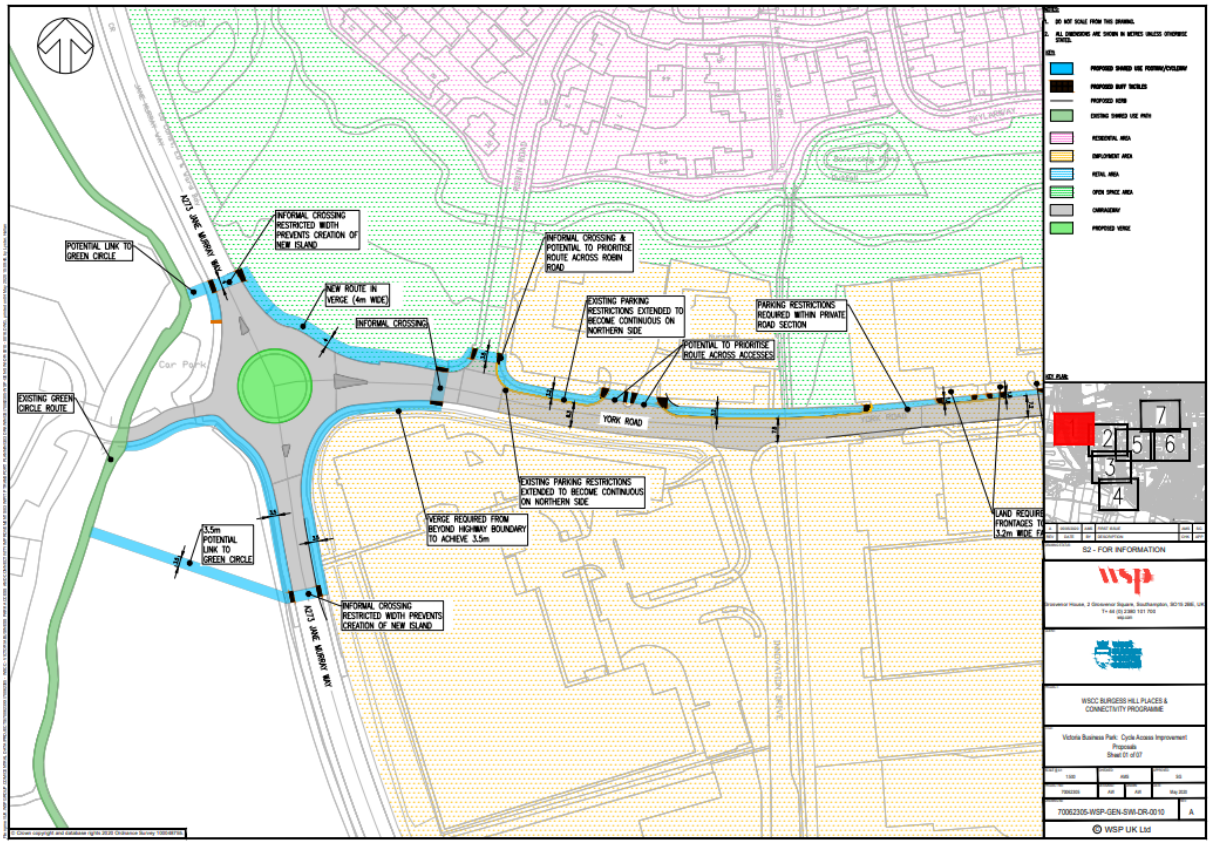
Figure 2.9 – Western Gateway and Wivelsfield Station Completed Scheme



6. Victoria Business Park

The scheme proposals include pedestrian and cyclist route improvements for the major employment area of Victoria Business Park. Better connection of the site with the Western Gateway, Burgess Hill Town Centre and the "Green Circle" route is expected to enhance sustainable transport choices. This was subject to public engagement May – June 2020.

Figure 2.10 – One of Seven Plan Showing the Possible Improvements

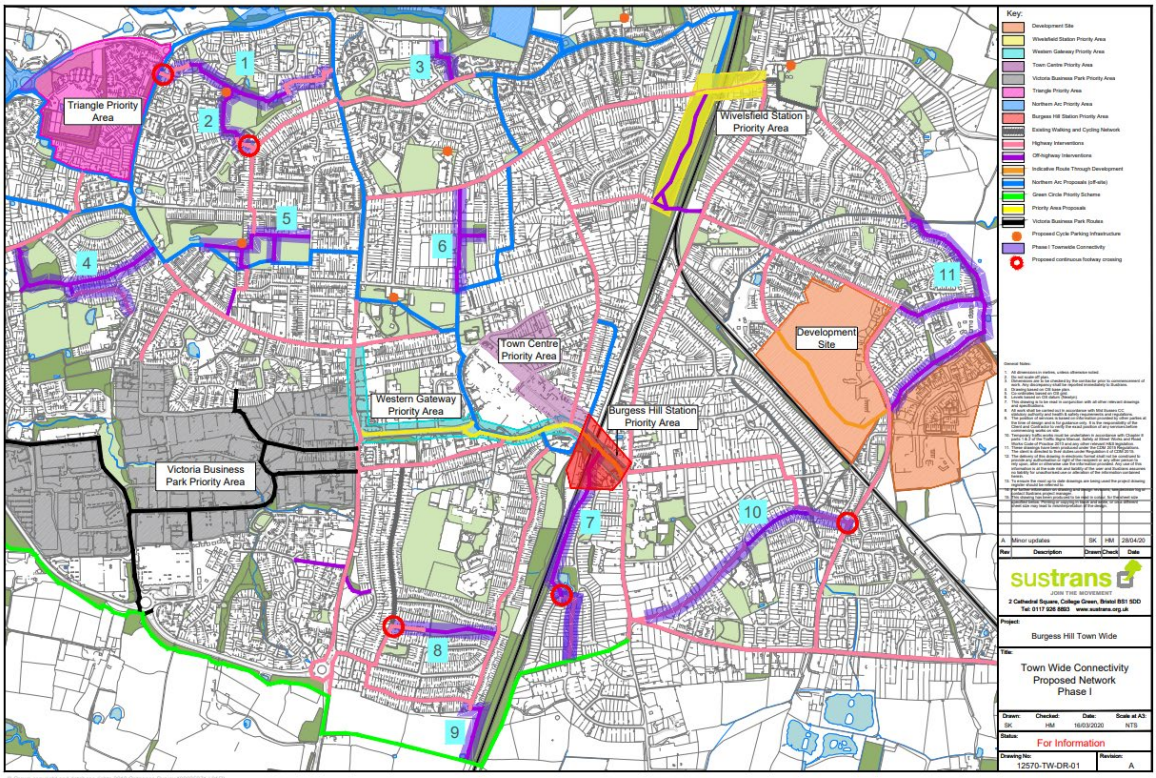


Source: https://www.burgesshill.net/transport/sustainable-transport/public-engagement-may-june-2020.html

7. Green Links

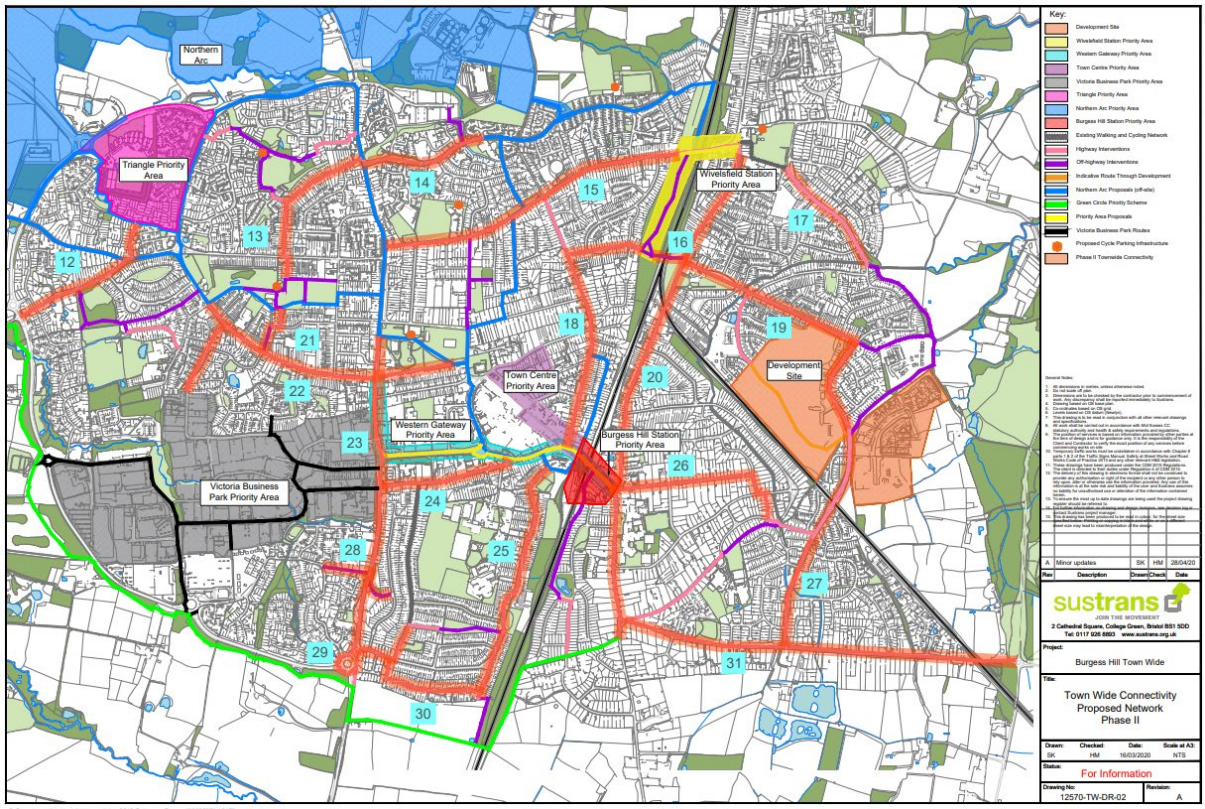
Improvements along the section between Keymer Road and Gatehouse Lane of the Green Circle have been identified due to its links with the town's key employment, leisure and retail areas. The proposals involve widening of the paths and bridge on Pangdean Lane, removal of barriers to improve accessibility, improvements to crossings, walking, cycling and wheeling facilities along the A273 London Road, installation of gateway features at Gatehouse Lane and Malthouse Lane, and connections with future schemes. This was subject to public engagement May – June 2020.

Figure 2.11 - Phase 1 Routes (in Purple)



Source: https://www.burgesshill.net/images/documents/1112570-tw-dr-01phase-i.pdf

Figure 2.12 - Phase 2 Routes (in Orange)



Source: https://www.burgesshill.net/images/documents/1212570-tw-dr-02phase-ii.pdf

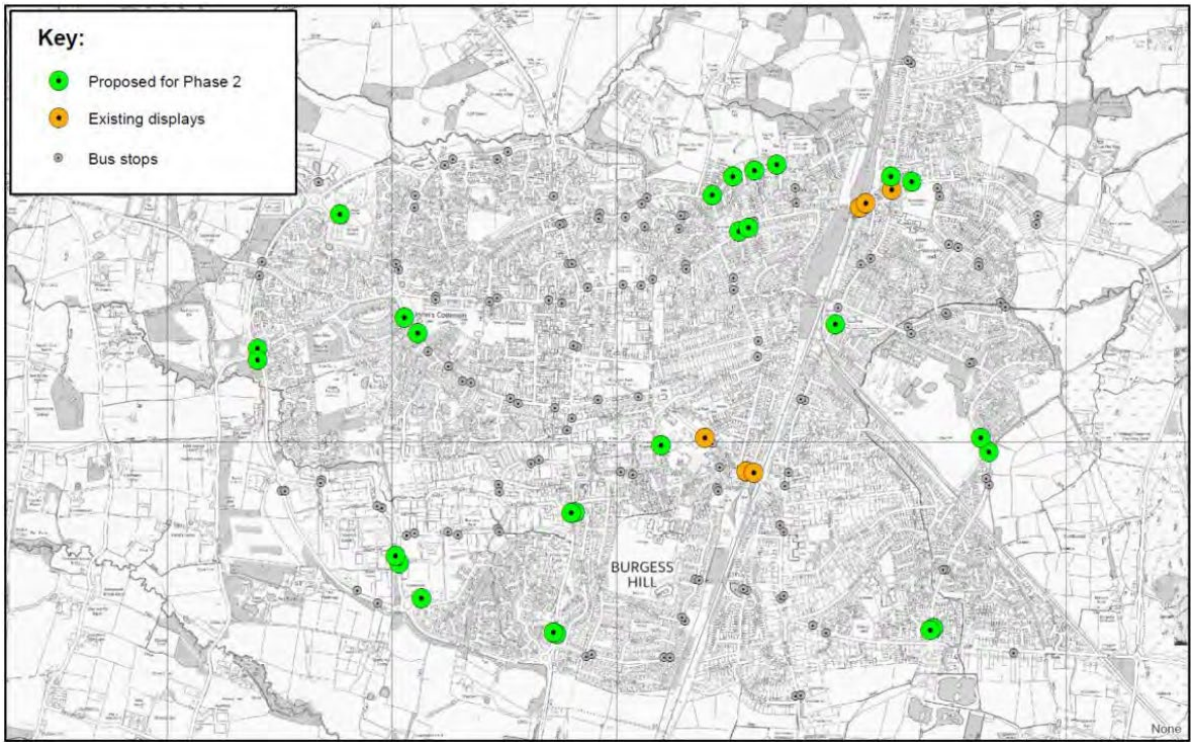
8. The Triangle Leisure Centre

The proposals enhance pedestrian and cyclist routes through the Triangle Leisure Centre, to offer improved, sustainable travel alternative to and from the site. The scheme has been developed to prioritise pedestrian and cycle movement within and around the leisure facility by widening routes, creating additional secure cycle parking, and improving facilities along Sussex Way, i.e. a shared pedestrian/ cycle path on the western side of Sussex Way, and new crossing facilities and other improvements to the public realm.

9. Bus Infrastructure Improvements

The Place and Connectivity Programme include improvements to bus services and bus stop infrastructure. Construction of passenger waiting facilities, Real Time Passenger Information along service 26 bus stops will be associated with lower perceived waiting time, thus encourage people to use public transport. **Figure 2.13** shows the bus stops identified for improvement are shown in green.

Figure 2.13 – Bus Infrastructure Improvements Plan



Source: https://www.burgesshill.net/images/01burgess-hill-rtpi-phase-2proposed.pdf

2.7.7 As of July 2024, fifteen new bus shelters with real time passenger information are being installed around Burgess Hill[1].

[1] https://www.burgesshill.gov.uk/wp-content/uploads/2024/07/About-Town-Issue-155-digital.pdf

9. Cycle Parking Improvements

2.7.8 Improved and new cycle parking facilities are proposed to enhance cycle routes usage in the following strategic locations:

- Burgess Hill Football Club;
- Worlds End Recreation Ground;
- St. John's Park;
- Fairfield Recreation Ground;

2.7.9 It is understood that further locations for the provision of cycle parking will be shaped by public engagement.

2.7.10 In December 2023 the programme was recorded to have delivered approximately 11km of off-highway and Public Rights of Way pedestrian and cycle improvements through the Growth Deal's partnership work with MSDC[2].

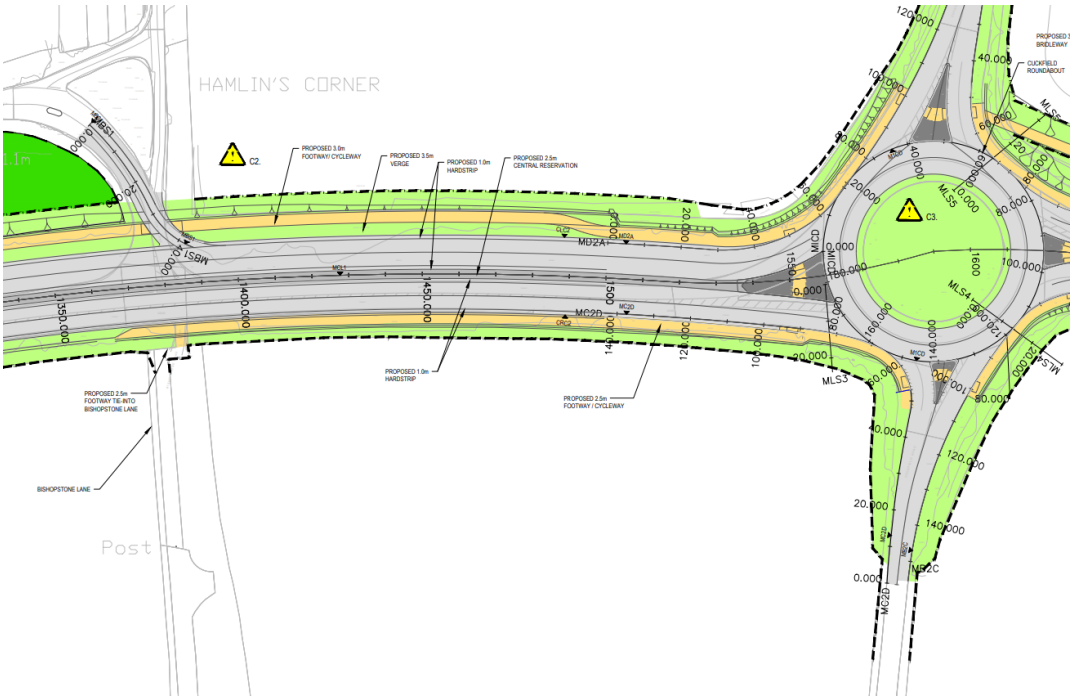
2.8 Upgrading Road Infrastructure

2.8.1 The new dual carriageway was officially opened on Friday 8 April 2022. The work to the new Brookleigh roundabout with the A2300 by Homes England completed in 2023. The scheme also provides opportunities for more journeys to be made by cycling and walking through the provision of:

- a 3m-wide shared use footpath and cycle path on the north-side between the A23 and the proposed Brookleigh (previously known as Northern Arc) roundabout
- a 2.5m-wide shared use footpath and cycle path on the south-side of the A2300 between the A23 and Pookbourne Lane/Stairbridge Lane junction and also between Bishopstone Lane and Cuckfield Road roundabout.

[2] Burgess Hill Place and Connectivity Scheme Phase One | Your Voice West Sussex

Figure 2.14 – A2300 Shared Footway/Cycleway (Bishopstone Lane to Cuckfield Road Section)



3 VISION FOR THE DEVELOPMENT

3.1 Emerging Masterplan

3.1.1 The emerging site masterplan is presented below.

Figure 3.1 – Emerging Land West of Burgess Hill Masterplan

3.1.2 The emerging proposals include:

- Up to 1,350 homes, including 30% affordable homes
- A pioneering approach to active travel including walking and cycling
- Burgess Bikes community bike hire scheme
- Primary School with early years and potential for 'SEND' facilities
- A new community shop and café, built at the heart of the community
- Open spaces and a village green for community events
- Play areas to support outdoor exercise and socialising

- Flexible workspaces, together with community floorspace
- A mix of housing to support generational needs
- A C2 extra care facility
- Allotments and community orchards
- An accessible, self-service library

3.2 Indicative Phasing

3.2.1 An indicative phasing programme is currently being considered for the purpose of developing the sustainable transport strategy (see **Section 4**) and the preliminary travel demand assessment (see **Section 5**):

- Year 1: early infrastructure (Cuckfield Road access, Gatehouse Lane and Cuckfield Road improvements)
- Year 2: c. 50 units, and completion of the village green
- Year 3: c. 150 units
- Year 4: c. 320 units and completion of the spine road (Cuckfield Road to A273 through the scheme) opening of the school and partial village centre (community hub)
- Year 5: c. 500 units and opening of the allotments.
- Year 6: at c. 750 units
- Year 7: at c. 1,000 units and full opening of the village centre retail.
- Year 8: at c. 1,250 units, and opening of the C2 land use.
- Year 9: at c. 1,350 units
- Year 10: complete development of c. 1,350 units

3.3 Land West of Burgess Hill Transport Vision (WBTV)

3.3.1 Thakeham Homes aspire to create a sustainable community, implementing the NHS Healthy New Towns principles:

- **Healthy Living**, by providing:
  - A 5km "Health Route" for running and walking as well as community allotments and orchards where residents can grow their own food and engage with others and nature.
  - New flexible community-run facilities, including shops and a café along with new recreational facilities.
- **Sustainable Transport**, by delivering:
  - 'Burgess Bike' cycle hire scheme

- Improved and extended pedestrian and cycle links, connecting the development to local jobs and transport hubs, including local bus stops and Burgess Hill and Wivelsfield railway stations.
- Enhanced bus services providing connections to Burgess Hill, Hustpierpoint, Crawley, Horsham and Brighton.

- **Homes for All**, by providing:
  - A minimum of two housing brands offering a traditional and contemporary style of living.
  - "Tenure blind" affordable housing to policy compliant levels.
- **Supporting Economic Growth,** the location of the site represents an important regional location in proximity to key employment areas.
- **Infrastructure Led**, by delivering education and community facilities alongside early infrastructure so that all services are at hand to establish the community from the outset.
- **Carbon Neutrality**, with all homes being carbon neutral and net-zero in lifetime operation from 2025.
- **Biodiversity,** by providing at least 10% Net Biodiversity Gain and year-round variation for wildlife, as well as green and blue infrastructure.
- **Education**, by providing a new primary school and promoting the importance of ecology and biodiversity through Thakeham's award-winning 'Eddie & Ellie Wild Adventures'.

4 EMERGING SUSTAINABLE TRANSPORT STRATEGY

4.1 Introduction

4.1.1 The proposed transport strategy for Land West of Burgess Hill has been developed taking into account the proximity of the site to Burgess Hill and availability of active travel links (see **Figure 2.1)** and public transport services. The proposed sustainable transport strategy takes into account the following:

- Review of potential travel demand to /from the development (see **chapter 5**)
- Publication of the MSDC Local Cycle & Walking Infrastructure Plan (LCWIP) in March 2023 (routes A, E, F shown in **Figure 2.2**).
- Discussions and information sharing with the Science & Technology Park
- Discussions with the promoter of Sayers Common draft allocated site (draft policy DPSC3) and their transport consultants.
- Conversations with local bike share and cycle hire operators - see **section 4.3**.
- Conversations with bus operators Metrobus and Compass Travel between 2022 and 2024 – see **section 4.4**.
- Conversations with car club operators – see **section 4.5**.
- Ongoing discussions with MSDC and WSCC.

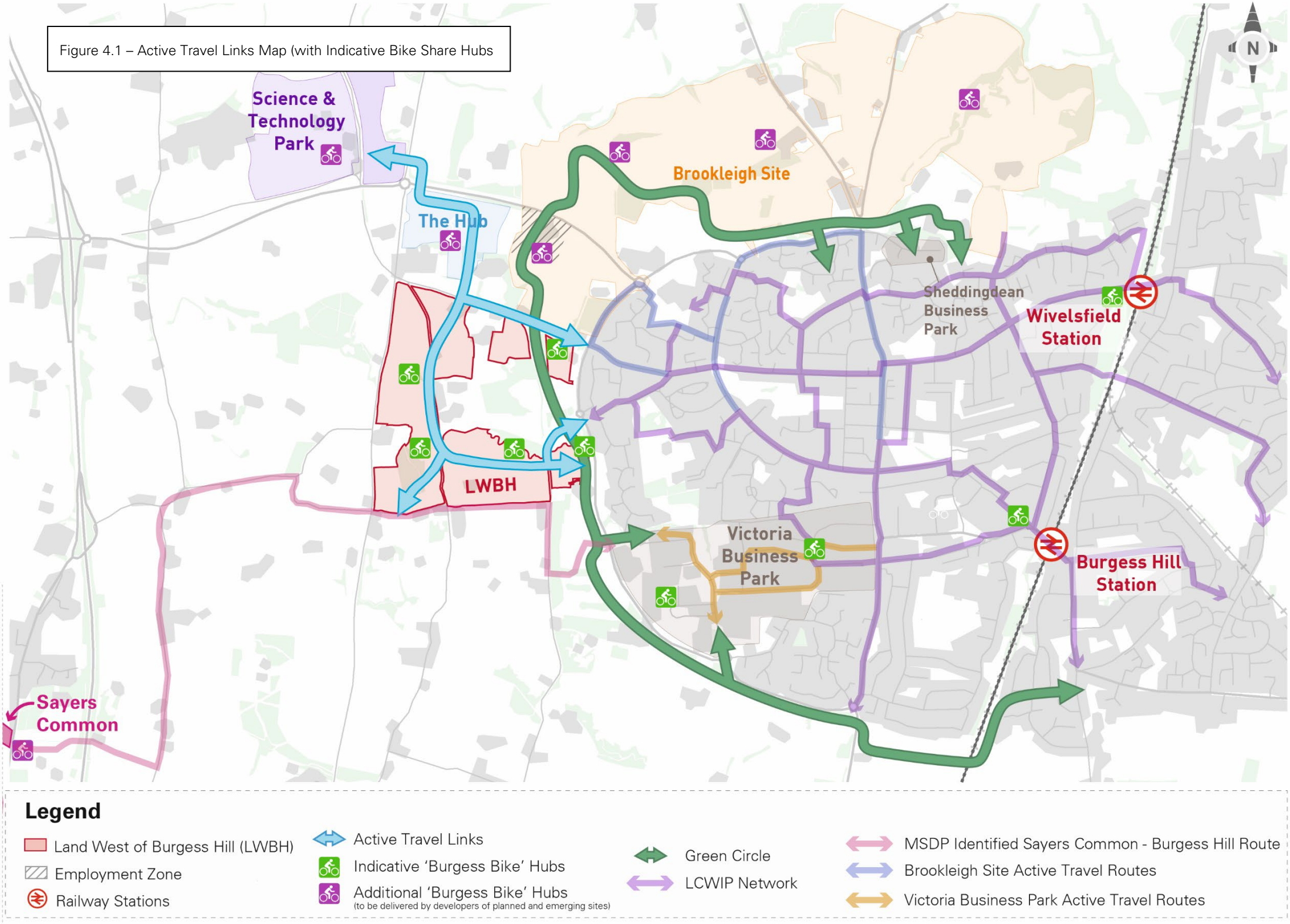
4.2 Active Travel Links

4.2.1 **Figure 4.1** shows existing and proposed active travel links connecting the site with Burgess Hill Town Centre, The Hub, the Science & Technology Park, Sayers Common (draft allocation) development, as well as the Green Circle (which connects with the Brookleigh Site, to the north, and employment and shopping facilities to the south of Burgess Hill).

4.2.2 The development will be designed to be compact and walkable with a comprehensive network of high-quality segregated walk and cycle links.

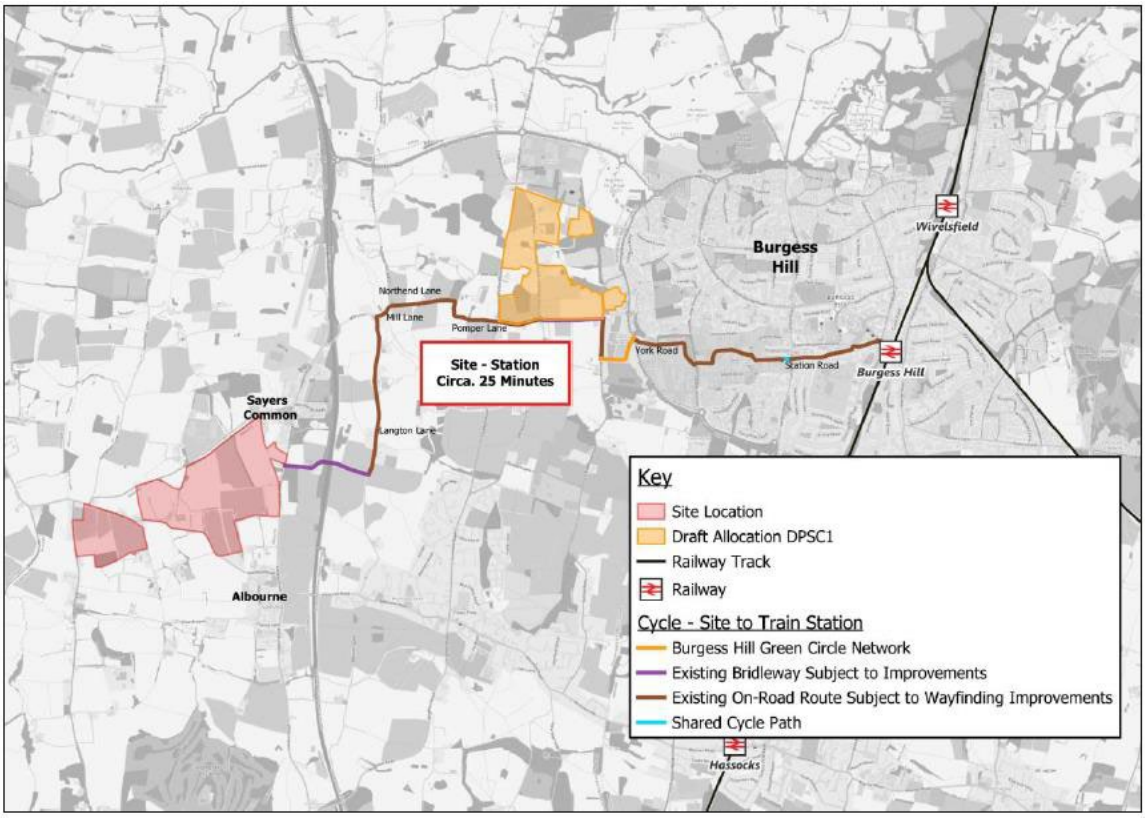
4.2.3 Green travel corridors within the site will exploit the potential for High Hatch Lane as a pedestrian/cycle priority Quiet Lane and will integrate and enhance the existing PRoW which cross the site. There is the potential to retain and enhance the historic routeways of High Hatch Lane and Pangdean Lane.

Figure 4.1 – Active Travel Links Map (with Indicative Bike Share Hubs



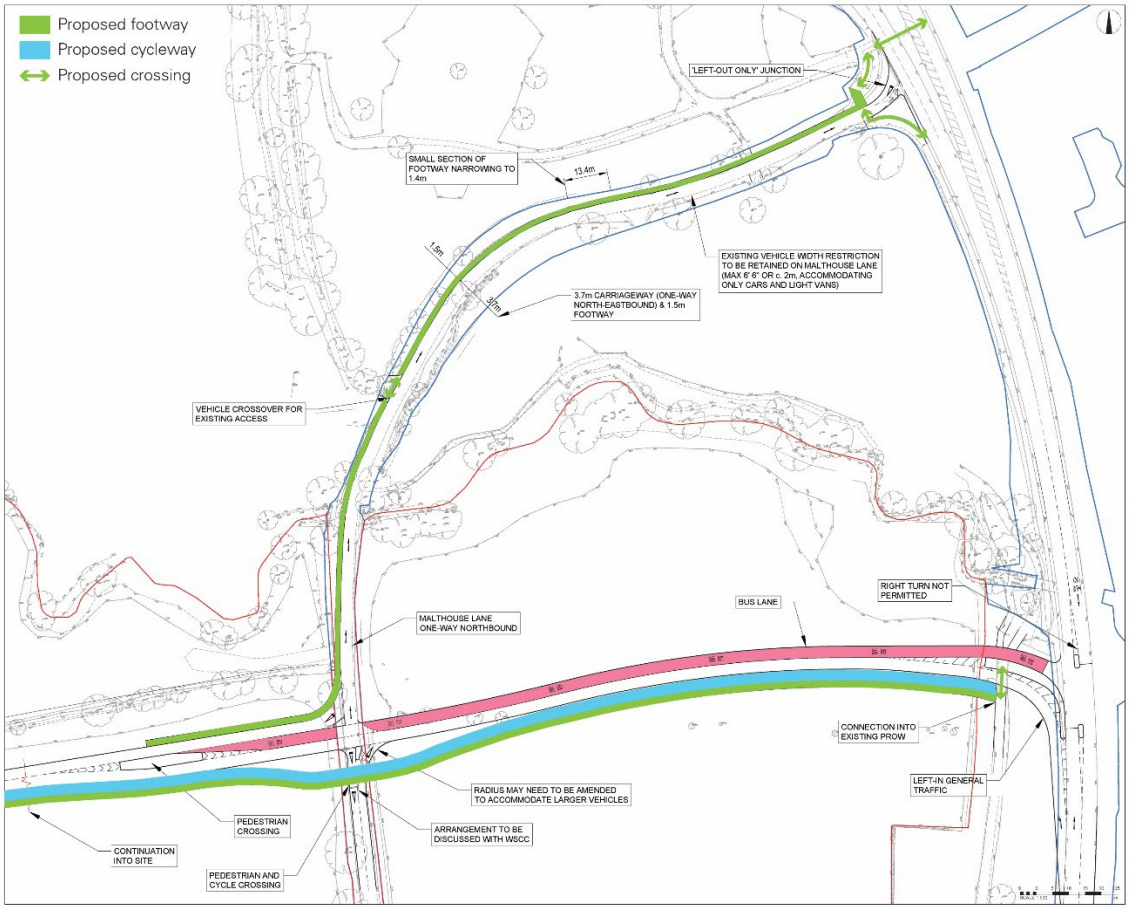
4.2.4 **Figure 4.2** shows Mid Sussex Cycle Route Proposal from Sayers Common to Town Centre, which could be routed through the Land West of Burgess Hill.

Figure 4.2 - Mid Sussex Cycle Route Proposal from Sayers Common to Town Centre



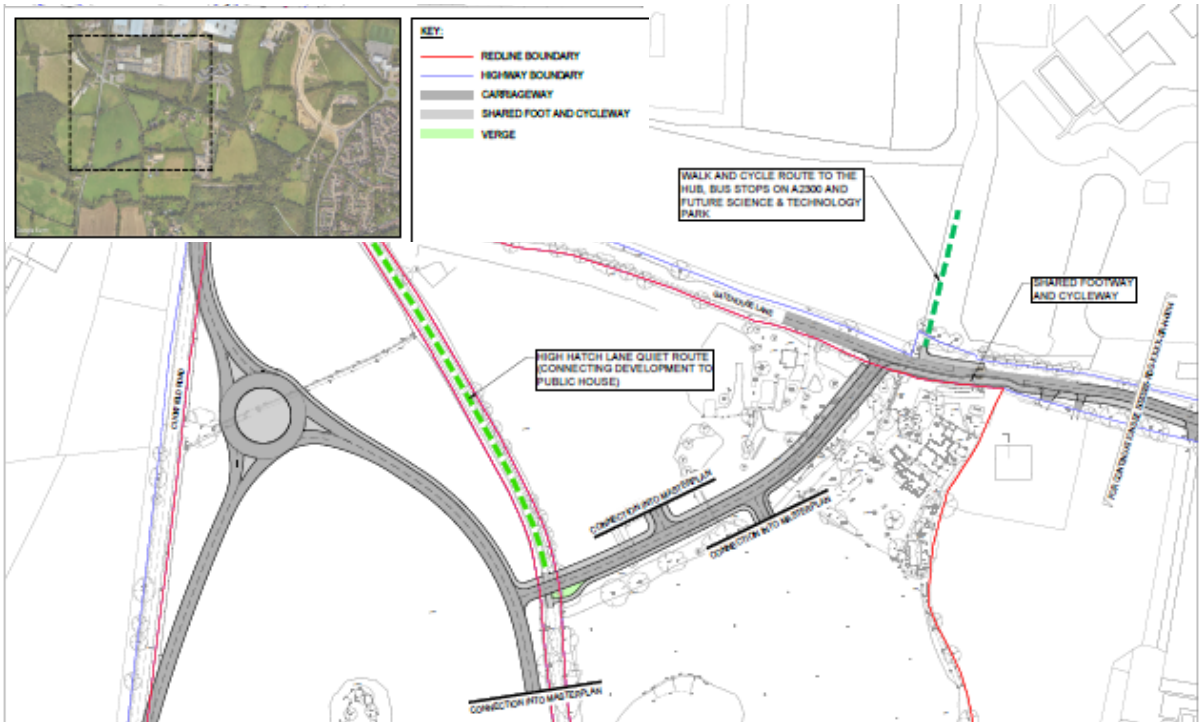
4.2.5 Discussions with the promoter of Sayers Common draft allocated site (draft policy DPSC3) and their transport consultants has identified that the Sayers Common allocation would deliver enhancements to the route between Sayers Common and Land West of Burgess Hill, which would connect to the new active travel links through Land West of Burgess Hill to Jane Murray Way and the Green Circle Network. The eastern connection to Jane Murray Way and the Green Circle Network is shown in **Figure 4.3**.

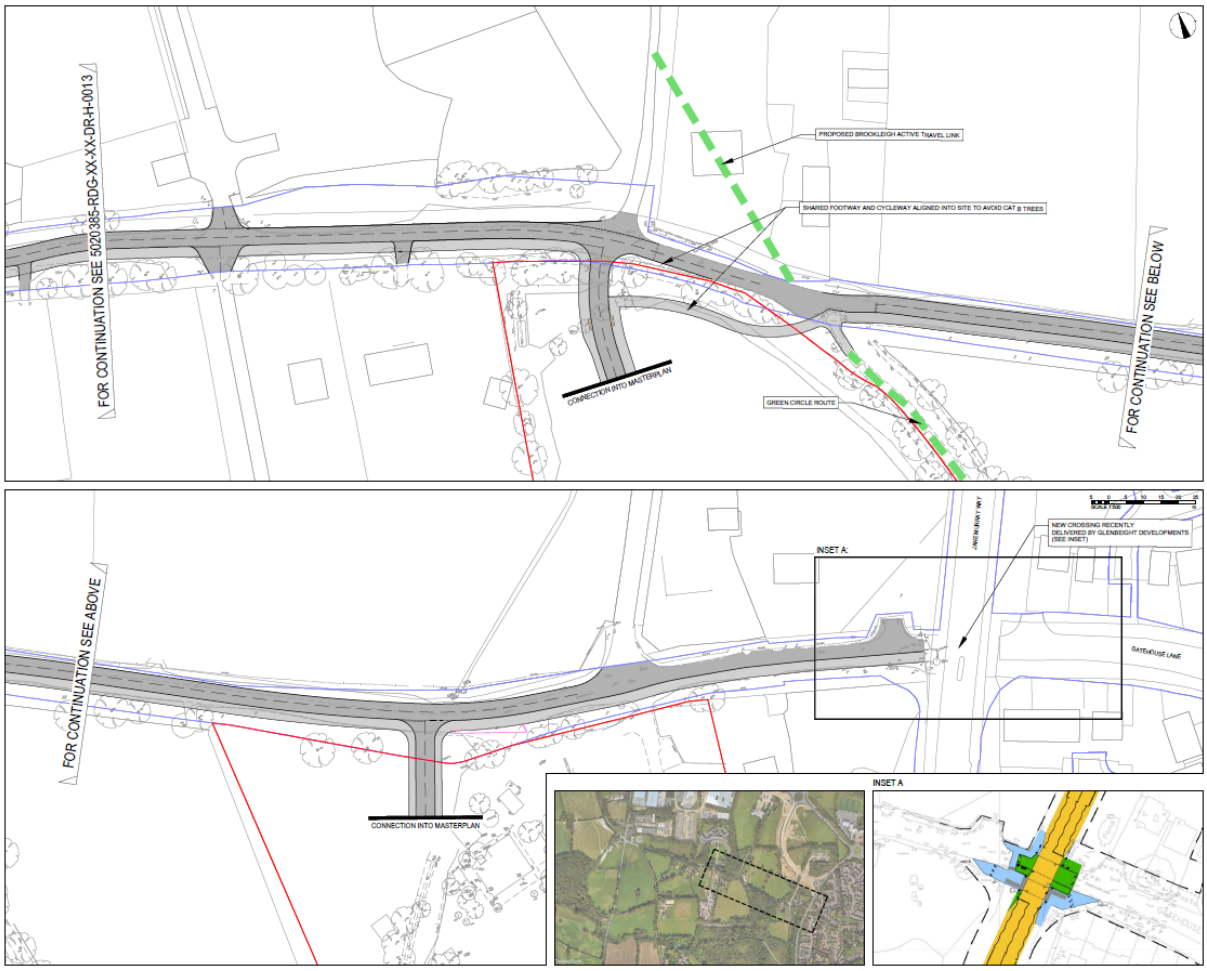
Figure 4.3 – Footway On Malthouse Lane and Cycleway to Green Circle Network



4.2.6 Active travel links connect to the shared cycleway through The Hub off Gatehouse Lane and to the recently delivered crossing over Jane Murray Way into the town from Gatehouse Lane. The improvements are shown in **Figure 4.4** and are included in **Appendix F**.

Figure 4.4 - Gatehouse Lane Active Travel Route Drawing





4.3 'Burgess Bikes' Scheme

Introduction

4.3.1 The implementation of a 'Burgess Bikes' cycle hire scheme at LWBH and other key destinations in Burgess Hill is being promoted by Thakeham. It is expected that this would operate as part of a wider mobility hub where different and connected transport modes would be available for residents of the development.

Options

4.3.2 Ridge has engaged with Brompton Bike Hire, and Bike Share operators Beryl Bikes and Donkey Republic to seek their advice in developing a commercially viable scheme. The following options have been considered:

- Option 1: Provision of:
  - c. 24 Brompton Bike Hire bikes and 16 lockers at LWBH, and
  - 100 Bike Share eBikes across Burgess Hill (including LWBH, railway stations, large employment sites)
- Option 2: Provision of:

- c. 24 Brompton Hire bikes and16 lockers at LWBH,
- 12 Brompton Hire bikes and 8 bike lockers at each railway station, and
- 8 bike lockers at Victoria Business Park.

4.3.3 The cycle hire/ bike share scheme would need to be operated by MSDC or WSCC either as a partner with Thakeham from set up or after completion of LWBH (anticipated 10 years), whichever is preferred. A bike share scheme generally requires higher levels of ongoing operational funding than a bike hire scheme. The level of funding will depend upon growth in demand and revenue over the 10 years, as there are a greater number of bikes and management of these. Brompton Bike Hire generally only require funding for replacement of cycles every five or six years, lockers are very robust and those installed 14 years ago remain in operation. Brompton Bike Hire measures its success on increasing cycling, as it is funded by Brompton, therefore its business model differs from bike share operators who need to make some profit.

4.3.4 Brompton has close to 80 docks nationwide and 49 in the south east. A number of case studies were discussed with Brompton with regards to different aspects of their service:

- Brompton worked with Enterprise, Stagecoach on the first Mobility Hub near the O2. They saw 50% uplift in utilisation by integrating the services. Funded by BP (they had their EV charging at that location), unfortunately BP's success metric was based upon how many coffees they were selling, so they closed the scheme.
- Brompton is operating a successful scheme (4 lockers) at Newark, which a town with similar population to Burgess Hill, business park, two railway stations.
- Manchester Piccadilly and Woking were implemented 14 years ago and are still operating successfully with the same lockers.
- The mobility hub at Newham was planned by Newham Council, capital provided by Hadley and marketed by Enterprise and Brompton.
- Lockers can be relocated. Brompton is happy to teach a competent contractor to move the lockers successfully to help with development phasing. An example at Bell hammer in Bristol was given – this was used by construction workers first and then by new residents

Option 2 Implementation

4.3.5 At this stage, it is expected that Option 2 will be taken forward due to uncertainty regarding whether MSDC or WSCC would wish to take on the responsibility of the long-term operation of a bike share scheme and associated costs with Option 1. Option 1 would be considered subject to further discussions with MSDC and WSCC regarding long term strategy for funding bike share through ongoing developer S106 contributions or other funding stream/mechanism.

4.3.6 Promoter of Sayers Common draft allocated site (draft policy DPSC3) has agreed that collaboration to deliver a comprehensive scheme would be beneficial.

4.3.7 The advice provided by WSCC in their preapplication comments (see **Appendix D**) is as follows:

"Consideration should be given as to the best approach for the introduction and expansion of the proposed cycle hire scheme, in order to ensure the greatest chance of it becoming viable in the longer term. As the proposed development is largely residential and cycle parking will

be provided at dwellings, the potential market for a cycle hire scheme is likely to be modest. Figure 4.3 indicates a phasing approach for the implementation of the of the scheme, over a 12-year period, beginning with the development, The Hub, Victoria Business Park and Burgess Hill Station. WSCC has concerns that the relatively long lead time to create a town-wide network, which may also impact on uptake.

"WSCC considers that the proposed scheme would have the greatest opportunity of being sustainable in the long term, if it was rolled out across Burgess Hill providing the greatest number of potential users and destinations, from the outset.

Consideration should also be given to collaborating with the developers of the other strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park and The Hub), where possible, to see the scheme rolled out to these locations at the earliest opportunity, to increase take up. Consideration should also be given to extending the area of the proposed scheme to include Sayers Common, to complement the proposed active travel route [see **Figure 4.9**] *if it includes e-bikes, as this would be considered a reasonable distance.*

[…] WSCC considers that the availability of Routes A, E and F identified in the MSDC LCWIP for Burgess Hill would help to enable the success of the cycle hire scheme and should be delivered in advance of the roll out of the scheme."

Indicative Programme of Implementation (Option 2)

4.3.8 The indicative programme of implementation of the Brompton Bike Hire scheme on site and off site (without a separate bike share scheme) is provided below:

Table 4.1 – Brompton Bike Hire Indicative Programme of Implementation (on Site) - Lockers

Year	Occupations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	New Services
1	0																	
2	50	■	■	■	■	■	■	■	■									8 bike lockers and 12 bikes
3	150	■	■	■	■	■	■	■	■									
4	320	■	■	■	■	■	■	■	■									
5	500	■	■	■	■	■	■	■	■									
6	750	■	■	■	■	■	■	■	■									
7	1,000	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Replace first 12 bikes and introduce 8 additional bike lockers, if demand requires
8	1,250	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9	1,350	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
10	1,350	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

Table 4.2 – Brompton Bike Hire Indicative Programme of Implementation (Off Site, without Bike Share) - Lockers

Year	Occ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	NS
1	0																									
2	50	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■									1.

3	150																									
4	320																									
5	500																									
6	750																									
7	1,000																									2.
8	1,250																									
9	1,350																									
10	1,350																									

Note 1: 8 bike lockers and 12 bikes at both Railway Stations (total 16 lockers and 24 bikes)
Note 2: Replace first 24 bikes and introduce additional 8 bike lockers at Victoria Business Park

Funding (Option 2)

4.3.9 It is expected that Thakeham would fund Phase 1 and Phase 2 bikes and lockers, as well as the marketing costs to promote the scheme during first implementation, and maintenance and replacement of bikes during the LWBH construction period (anticipated 10-year programme).

4.4 Bus Strategy

Background

4.4.1 A Statement of Common Ground between Mid Sussex District Council, West Sussex County Council, National Highways and the Site Promoter (Reference: SA9.10) was prepared for the preparation and adoption of Mid Sussex District Council Site Allocations DPD (June 2022) for the overall mobility and access to and from the site, as a result of the Science & Technology Park allocation. A Project Newton Mobility Strategy (November 2020) was agreed by all signatories and identified a new 'Fastway' service between Crawley and the Science & Technology Park, on the basis of two options: 1. four buses per hour in the peak periods, and 2. three buses per hours in peak periods.

4.4.2 Additionally, discussions have been held with local bus operators Metrobus and Compass Travel with regards to the following public transport opportunities:

- Extension of Metrobus service 20 (Fastway) to run south of Pease Pottage in Crawley to the Science & Technology Park, with a possible extension into proposed Land West of Burgess Hill site and potentially through the extension to Burgess Hill railway station.
- Diversion of Compass Travel service 100 via LWBH, with the exception of bus services supporting St Paul's Catholic College, and provision of an Express service 100A between Sayers Common and Burgess Hill Town centre via LWBH.
- Diversion of Metrobus service 273 via the A2300 and Cuckfield Road (along the proposed Land West of Burgess Hill site), if Fastway extension is undeliverable.

Metrobus Service Fastway 20

Fastway 20 Options

4.4.3 The options and phases for delivery for the service discussed were:

- If the core service continues to operate a 20-minute frequency service:

- Initial operation - Two additional vehicles to operate from Pease Pottage to Land West of Burgess Hill

- Later operation - Three additional vehicles (one additional to the initial stage) to operate to Land West of Burgess Hill extending into Burgess Hill town centre via Victoria Business Park, when the primary road connecting the development to the A273 is completed and if demand is identified.

- If the core service operates a 15-minute frequency service in the future:

  - Initial operation - Three additional buses to operate from Pease Pottage to Land West of Burgess Hill

  - Later operation – Four additional buses (one additional to the initial stage) to operate to Land West of Burgess Hill extending into Burgess Hill town centre via Victoria Business Park, when the primary road connecting the development to the A273 is completed and if demand is identified.

Fastway 20 Requirements

4.4.4 The services would require:

- Hydrogen buses.

- Bus priority to make the service reliable enough to meet the 'Fastway' brand requirements.

- A commercial viability assessment is to be undertaken to support a future planning application, All Metrobus services are commercially sustainable in the long term (generally 5-7 years), but will require pump priming initially. It is expected that initial investment will be within a budget of £1M - £2.3M (but up to £4.5M if extended into the town centre and 15min frequency). This could be carried out on the basis of the following phasing:

  - Extension of Fastway between Pease Pottage and Land West of Burgess Hill, 30-minute or 20-minute frequency (depending on core service frequency) – expected at around Year 2 or 3 of Land West of Burgess Hill build-out programme, when there are c. 100 homes at the development.

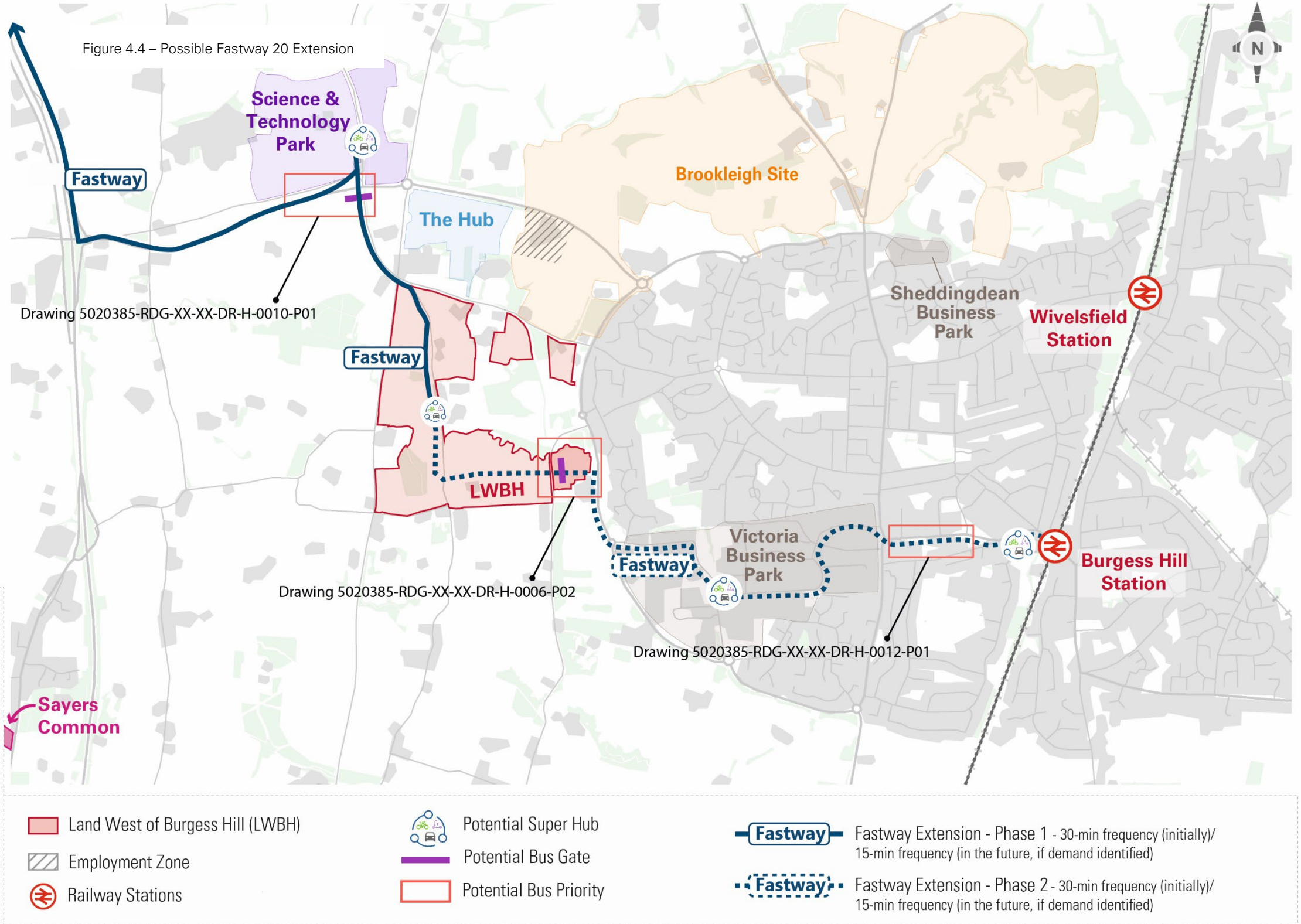
  - Extension of Fastway between Pease Pottage and Burgess Hill Town Centre, 30-minute or 20-minute frequency (depending on core service frequency) – expected at around Year 4 or 5 of Land West of Burgess Hill build-out programme, when the primary road connecting the site with the A273 is built.

  - Extension of Fastway between Pease Pottage and Burgess Hill Town Centre, 15-minute frequency – subject to sufficient demand.

Opportunities for Bus Priority

4.4.5 There are a number of opportunities for bus priority being investigated for Land West of Burgess Hill and for wider development growth at Burgess Hill. **Figure 4.4** shows the three possible locations for bus priority

Figure 4.4 – Possible Fastway 20 Extension

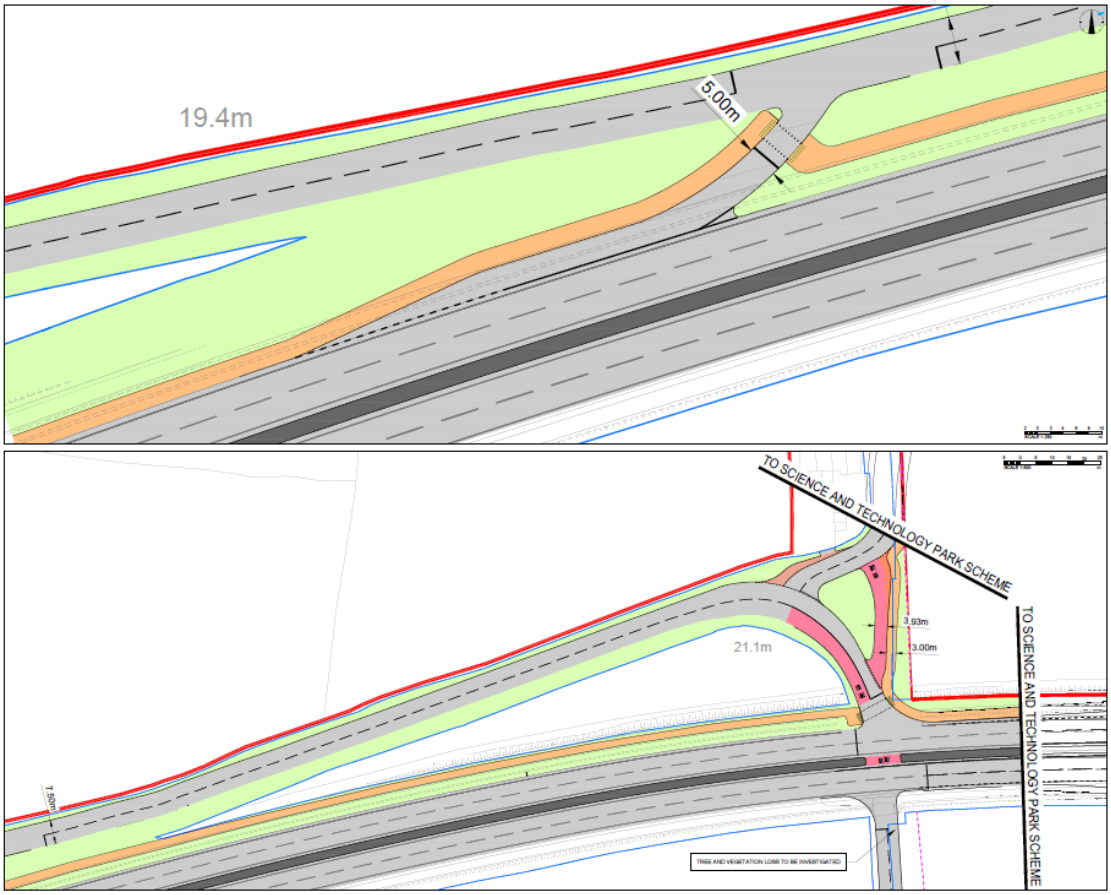


Possible Connections between the Science & Technology Park and Land West of Burgess Hill

4.4.6 Thakeham/Ridge will need to continue to work with the Science & Technology Park and WSCC to consider options to improve access and reliability for a possible future Fastway 20 extension. The service could either route via:

- the A2300/Cuckfield Road roundabout or future Science & Technology Park signalised gyratory with general traffic, or
- a new bus gate on Bishopstone Lane to the west of Cuckfield Road across the A2300, as shown in **Figure 4.5** and **Appendix E**. Further investigation into public highway extents, utilities, trees and ecology impacts will be required.

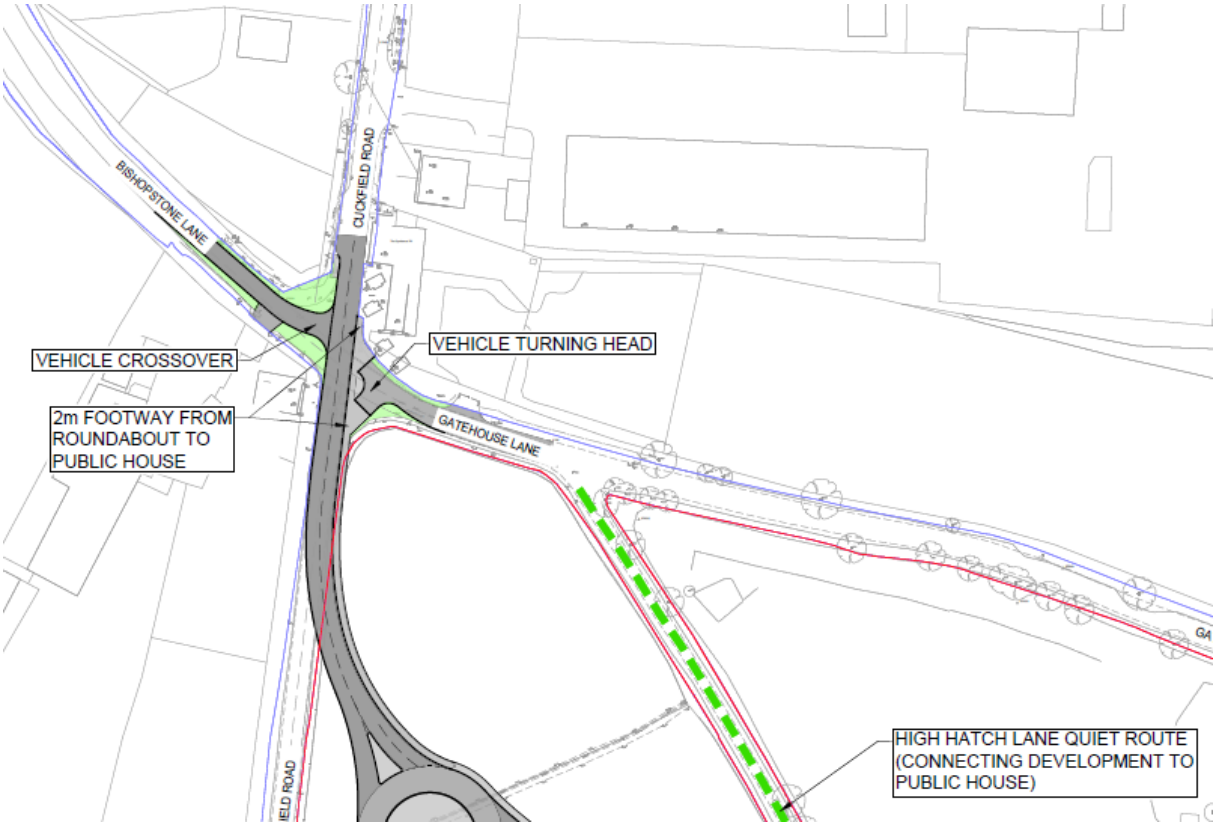
Figure 4.5 – Possible Bus Gate Across A2300 via Gatehouse Lane



Land West of Burgess Hill Northern Access

4.4.7 There is opportunity to simplify the Gatehouse Lane/Bishopstone Lane/Cuckfield Road junction to reduce delays for bus services either operating to/from the Land West of Burgess Hill (or along Cuckfield Road). This is shown in **Figure 4.6**.

Figure 4.6 – Cuckfield Road Access



Land West of Burgess Hill Eastern Secondary Access

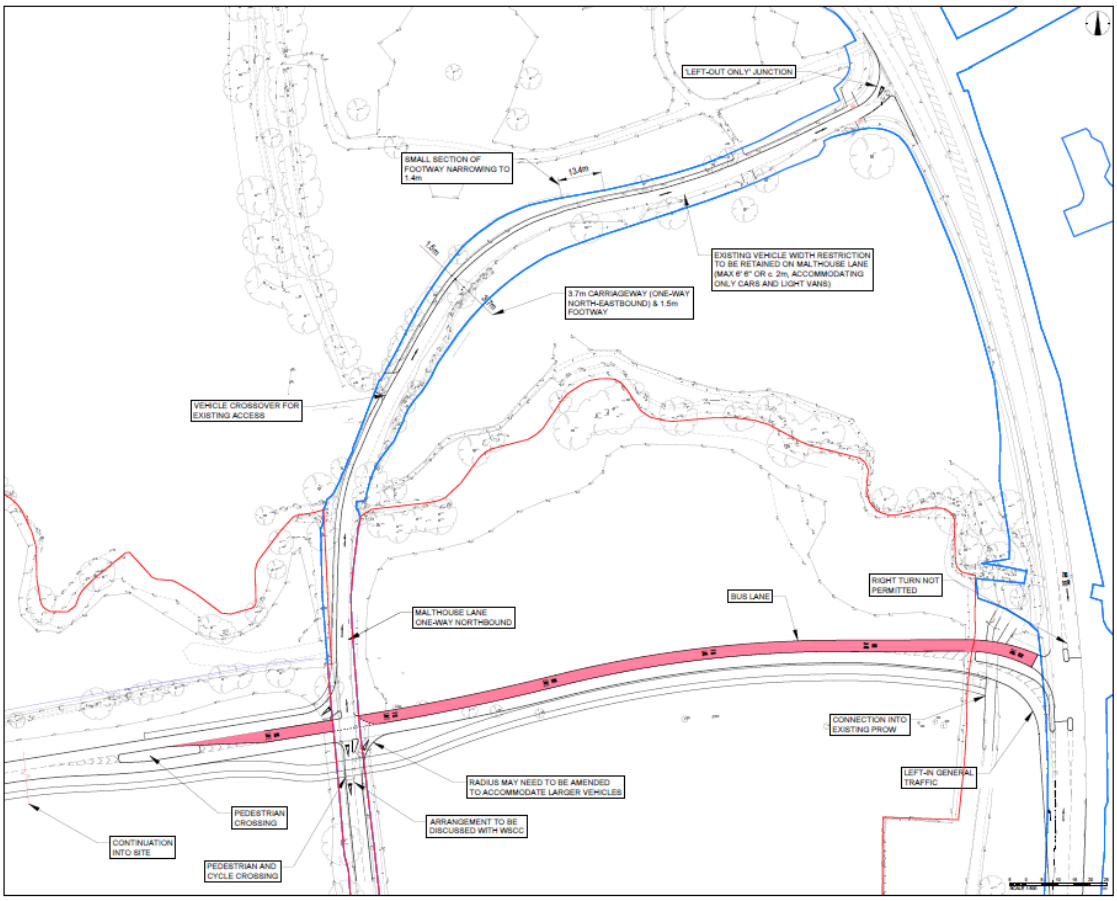
4.4.8 The proposed secondary access for land West of Burgess Hill to the east on to the A273 Jane Murray Way is as follows and as shown in **Figure 4.7**:

- Left-in / Bus-only exit junction at the A273 junction east of the eastern parcel.
- The road connecting Malthouse Lane and the A273 across the eastern parcel would comprise a bus lane in eastbound direction, and general traffic lane in westbound direction.
- Conversion of the northern section of Malthouse Lane to one-way northeast bound and the delivery of a new footway,

4.4.9 This proposed arrangement (which maintains a left-in left-out general traffic arrangement) has not been designed to increase capacity for vehicles, but seeks to:

- deliver a footway link to both the green circular route and to Jane Murray Way and into Burgess Hill;
- deliver bus priority;
- improve safety on Malthouse Lane, which is currently narrow with low visibility;
- help with resilience of the highway with regards to flood occurrence at the Pook Bourne Stream.

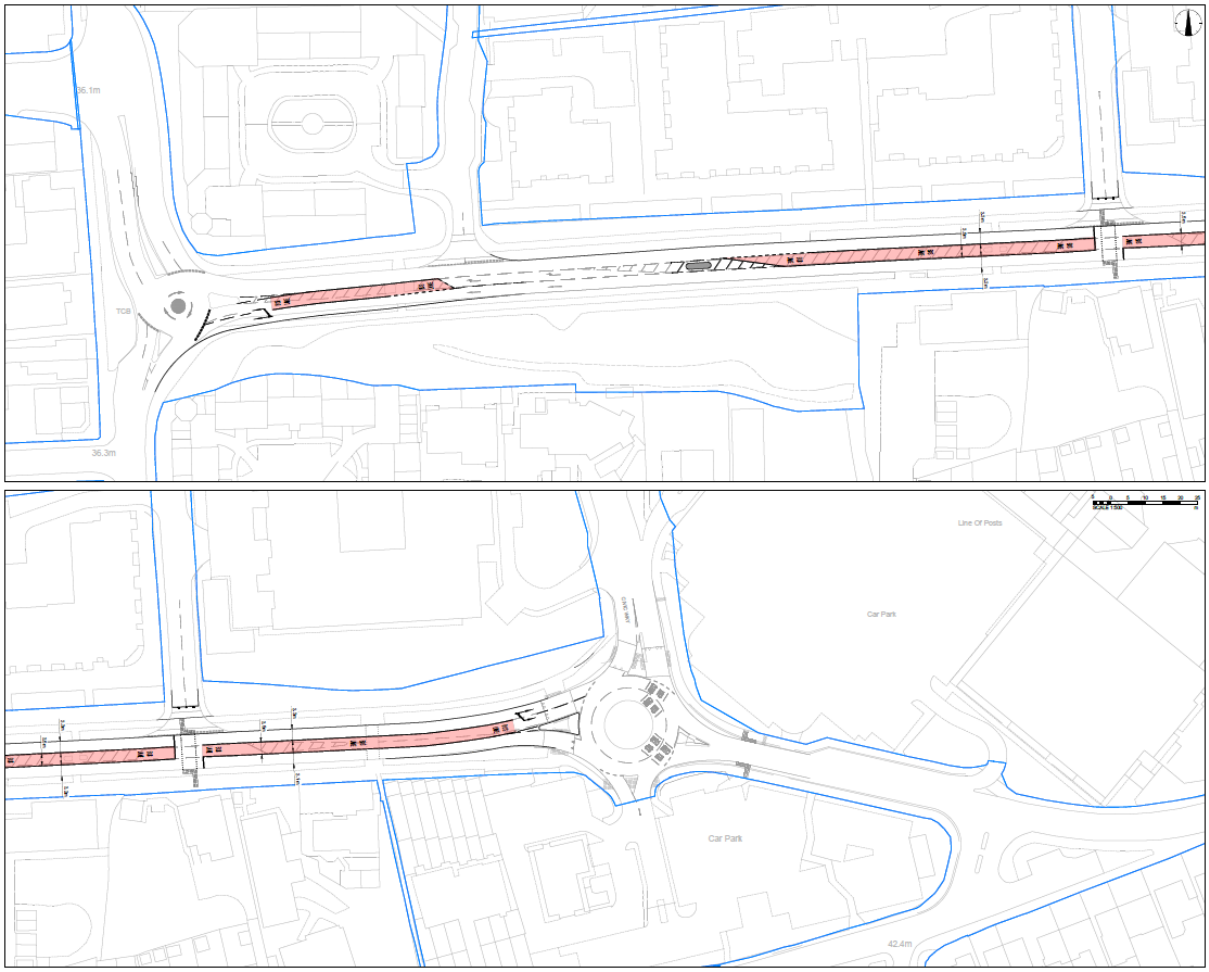
Figure 4.7 – Secondary Access and Bus Priority on A273 Jane Murray



Possible Bus Priority on Queen Elizabeth Avenue

4.4.10 Thakeham and Ridge will continue to work with the Science & Technology Park and other developments to investigate the delivery of bus priority improvements along Queen Elizabeth Avenue if Fastway 20 was to be extended to Burgess Hill town centre. This would also deliver improvements to potential bus services operating to/from Sayers Common. **Figure 4.8** and the drawing included in **Appendix E** shows a possible scheme design.

Figure 4.8 – Possible Bus Priority Along Queen Elizabeth Avenue



Funding

4.4.11 Funding of the Fastway extension is expected be shared between Thakeham Homes and wider benefiting allocations, including the already allocated Science & Technology Park. Further engagement between all parties will be required for the next stage of work.

Metrobus Service 273

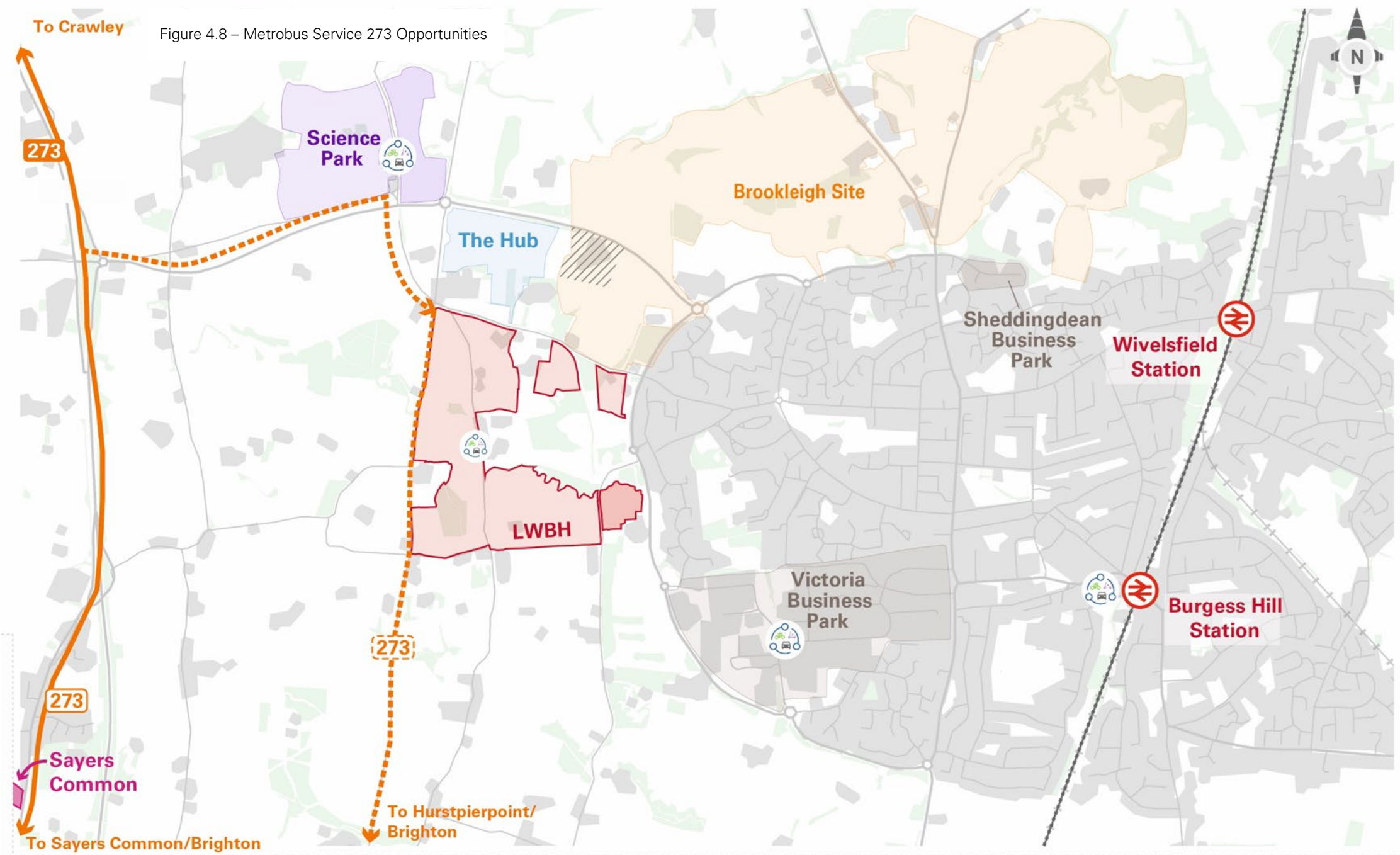
Service 273 Options

4.4.12 Metrobus agreed that they would be supportive of the improvement of bus service 273 from hourly service (understood in place since 11th May 2024) to half hourly services as follows:

- Hourly via Sayers Common (no changes to current route)
- Hourly via Land West of Burgess Hill (new service)

4.4.13 At this stage, it is expected that the additional service 273 (diverted via Land West of Burgess Hill) would only be considered if the proposals to extend Fastway to Land West of Burgess Hill development are considered commercially unviable e.g. due to lower potential passenger levels related to delays to other development or competing bus services. In that event, the additional service 273 would be introduced at an early stage of development (Years 1 or 2, c. 100 homes).

Figure 4.8 – Metrobus Service 273 Opportunities



Metrobus Indicative Programme of Implementation

4.4.14 The indicative programme of implementation of the Metrobus services is provided in **Table 4.3**, on the basis of two options for Fastway (Option 1: current frequency, Option 2: frequency improved to 15 minutes around Year 6), and Service 273 indicative programme implementation (in the event that Fastway cannot be extended:

Table 4.3– Metrobus Indicative Programme of Implementation

Service 10 Fastway (Option 1)- Bus Per Hour

Year	Occupations	1	2	3	4	New Services
Year 1	0					
Year 2	50					
Year 3	150					20min - to site access (18 hour a day) - 2 vehicles
Year 4	320					
Year 5	500					
Year 6	750					
Year 7	1000					20min - town centre (18 hour a day) - 3 vehicles
Year 8	1250					
Year 9	1350					
Year 10	1350					

Service 10 Fastway (Option 2 - core service increases to 15mins) – Bus per Hour

Year	Occupations	1	2	3	4	New Services
Year 1	0					
Year 2	50					
Year 3	150					30min - to site access (18 hour a day) - 2 vehicles
Year 4	320					
Year 5	500					
Year 6	750					
Year 7	1000					15min - to site (18 hour a day) - 3 vehicles
Year 8	1250					
Year 9	1350					
Year 10	1350					15min - town centre - 4 vehicles (18 hour a day)

Service 273 (Crawley - Brighton) - If Fastway not Delivered – Bus per Hour

Year	Occupations	1	2	3	4	New Services
Year 1	0					
Year 2	50					
Year 3	150					
Year 4	320					
Year 5	500					
Year 6	750					
Year 7	1000					
Year 8	1250					
Year 9	1350					
Year 10	1350					

4.5 Compass Travel

Background

4.5.1 A meeting between Ridge and Compass Travel on 29th April 2024 investigated options to divert and improve service 100 which currently runs between Horsham and Burgess Hill. Compass Travel is supportive of (see **Figure 4.9**):

- Diverting Bus Service 100 via Land West of Burgess Hill development, with the exception of bus services supporting the St Paul's Catholic College at start and finish times. The current route would be followed at these times to pick-up/ drop-off at The Triangle bus stops. Compass Travel has indicated that a detailed survey would be required to understand the effects at these bus stops.

- Provision of an Express service 100A between Sayers Common and Burgess Hill Town Centre and Land West of Burgess Hill.

Route 100 Requirements

4.5.2 The route through Land West of Burgess Hill would be subject to:

- Bus priority, to maintain (or improve, where possible) current journey times. Bus priority improvements are being investigated at the eastern access of Land West of Burgess Hill (and at the Bishopstone/A2300 junction) as identified above.

- Applying the following principles within development sites where diversions are proposed:

  - Higher density along the spine road

  - Reduced parking along the spine road

  - Bus link/priority to speed up buses

  - Advanced agreement on the location of bus stops.

- WSCC approval, as they tender this service and the routes may change.

4.5.3 The diversion of service 100 via Land West of Burgess Hill could be introduced at around Year 4 or 5 of the construction programme, when the primary development road connecting to Cuckfield Road to the A273 Jane Murray Way expected to be completed. No costs are anticipated as a result of the diversion of 100.

4.5.4 The introduction of an express service 100A would be funded by the Sayers Common development.

Figure 4.9 – Compass Travel Opportunities

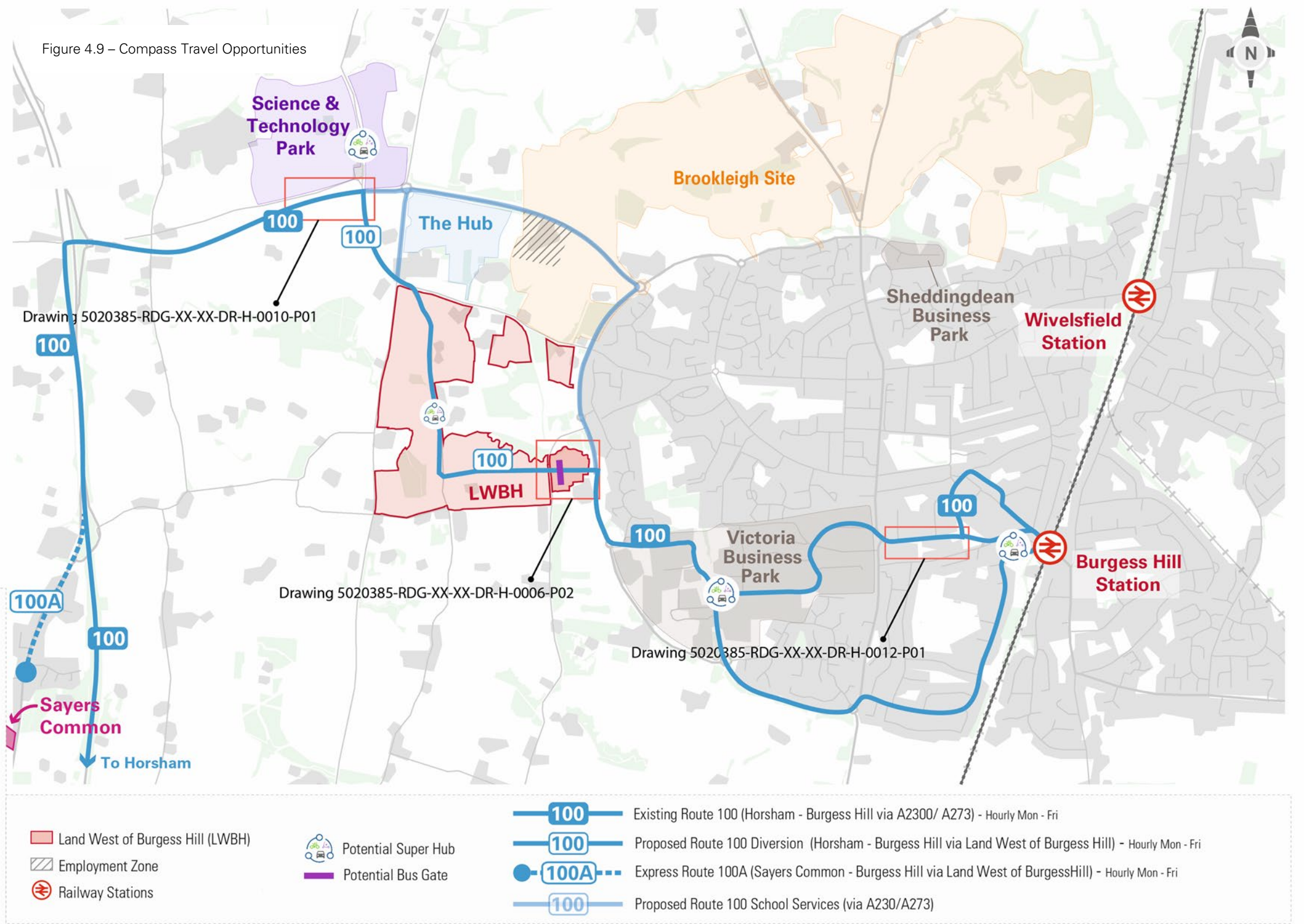
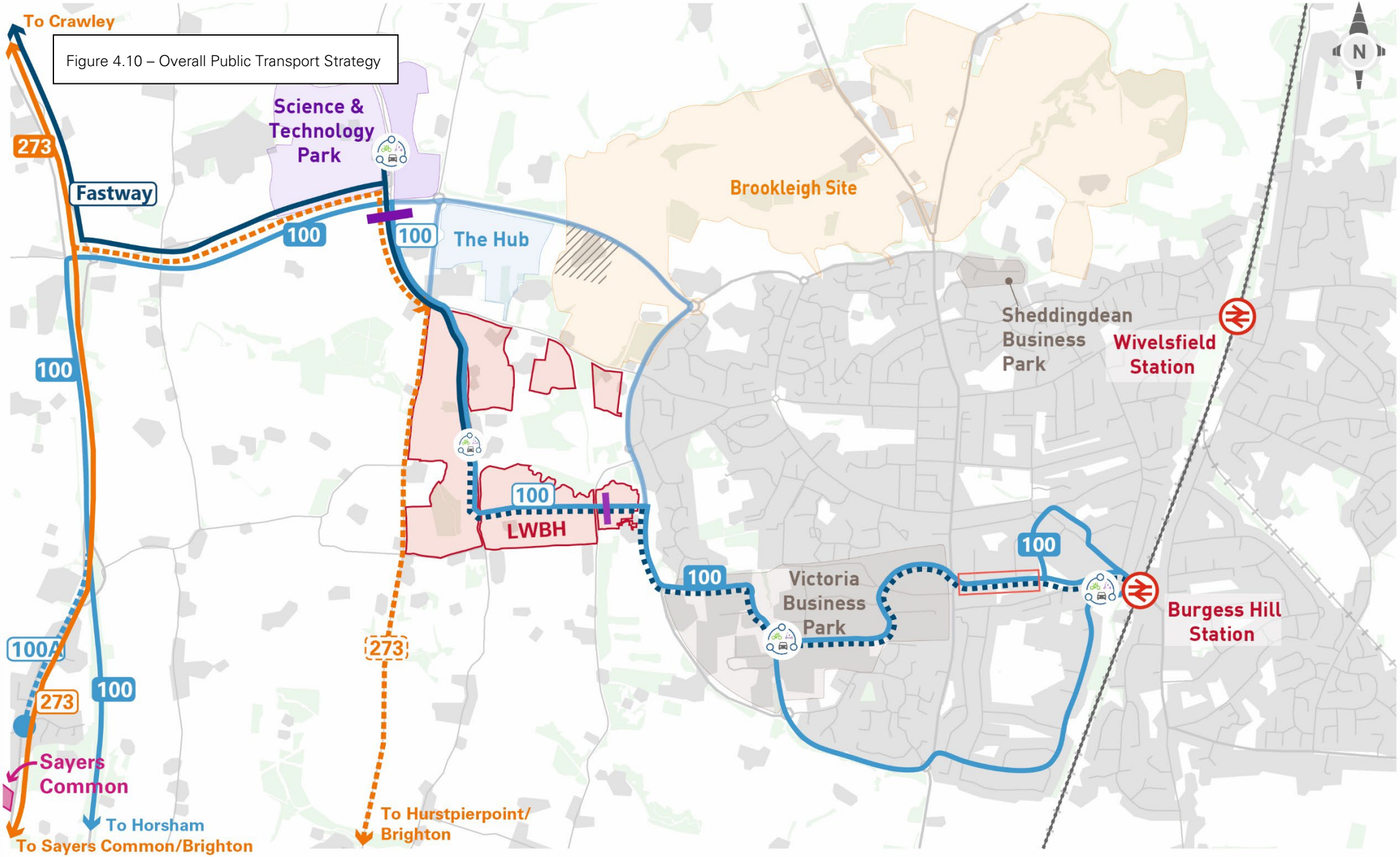


Figure 4.10 – Overall Public Transport Strategy



Land West of Burgess Hill (LWBH)

Employment Zone

Railway Stations

Potential Super Hub

Fastway — Fastway Extension - Phase 1 - 30-min frequency (initially)/ 15-min frequency (in the future, if demand identified)

Fastway — Fastway Extension - Phase 2 - 30-min frequency (initially)/ 15-min frequency (in the future, if demand identified)

A bus lane along Elizabeth Avenue would potentially attract an extension of the service to Burgess Hill Railway station

Potential Bus Gate

100 — Existing Route 100 Hourly Mon - Fri

100 — Proposed Route 100 Diversion Hourly Mon - Fri

100A — Express Route 100A Hourly Mon - Fri

273 — Existing Route 273 Hourly Mon - Sat

273 — Route 273 Diversion Hourly Mon - Sat

273 — Additional Route 273 Diversion Hourly - If Fastway not delivered

Compass Travel Indicative Programme of Implementation

4.5.5 The indicative programme of implementation of service 100 diversion, and potential provision of express service 100A, is presented below:

Table 4.4 – Compass Travel Indicative Programme of Implementation

Service 100 (Horsham - Burgess Hill)

Year	Occupations	1	2	3	4	New Services
Year 1	0					
Year 2	50					Walk/cycle connections to existing bus stops
Year 3	150					
Year 4	320					
Year 5	500					
Year 6	750					
Year 7	1000					Diverted through site
Year 8	1250					
Year 9	1350					Sayers Common Express Service diverted through site
Year 10	1350					

4.5.6 The combined bus service improvement options are presented in **Figure 4.10** and include:

- Extension of Metrobus service 20 (Fastway) to run south of Pease Pottage in Crawley to the Science & Technology Park, with a possible extension into proposed Land West of Burgess Hill site and potentially through the extension to Burgess Hill railway station.
- Diversion of Compass Travel service 100 via Land West of Burgess Hill, with the exception of bus services supporting St Paul's Catholic College, and provision of an Express service 100A between Sayers Common and Burgess Hill Town centre via Land West of Burgess Hill.
- If Fastway extension is undeliverable, the diversion of Metrobus service 273 via the A2300 and Cuckfield Road (along the proposed Land West of Burgess Hill site).

4.6 Car Club Strategy

Background

4.6.1 Enterprise and Co-Wheels car club operators have advised that three car club vehicles should be provided for the early occupations on the site, with additional vehicles to align with demand, up to approximately 13 vehicles.

4.6.2 Operators have advised that it would be expected that the scheme would operate commercially within two or three years. During the initial two years, the scheme would be marketed to raise awareness and encourage uptake. Marketing initiatives will include a

information on the car club within a welcome pack to all new residents, including registration information and discounts, as well as educational programmes and incentives i.e. free trials, discounts etc.

4.6.3 Promoter of Sayers Common draft allocated site (draft policy DPSC3) has agreed that collaboration to deliver a comprehensive scheme would be beneficial.

4.6.4 The advice received from WSCC in their preapplication response (see **Appendix D**) regarding the LWBH Car Club Strategy is as follows:

4.6.5 *"WSCC welcomes the proposal to introduce a car club in the development, as they provide a viable alternative to car ownership, encouraging sustainable transport modes. Further it is welcomed that it is proposed to site the car club vehicles with the proposed Mobility Hubs, as well as the Shared Mobility App/Mobility as a Service (MaaS), (see below). Whilst no indication is given, it would be preferable if the vehicles used in the scheme are electric cars, as this would help to minimise the environmental impacts of the development.*

4.6.6 *Consideration should be given to ensure a consistent approach to the introduction and roll out of the car club, with any other similar schemes that may be being proposed at any the other strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park, The Hub and Sayers Common), to ensure compatibility with the proposed Shared Mobility App/Mobility as a Service (MaaS)."*

Indicative Programme of Implementation

4.6.7 The indicative programme of implementation of a car club scheme at LWBH, on the basis of introduction of up to 13 car club vehicles (1 car club vehicle per 100 units), is presented below:

Table 4.1 – Enterprise Indicative Programme of Implementation

Year	Occupations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	New Services
Year 1	0															
Year 2	50															1 vehicle
Year 3	150															1 vehicle
Year 4	320															1 vehicle
Year 5	500															*
Year 6	750															*
Year 7	1000															*
Year 8	1250															*
Year 9	1350															*
Year 10	1350															*

*If demand requires additional vehicles (although these could be located in other developments)

4.7 Supporting Measures

4.7.1 The proposed strategy could be supported by a package of measures and initiatives to encourage residents to make more sustainable travel choices when leaving the development, these are likely to include:

- **Integration of Mobility Services:** shared transport services offered at Land West of Burgess Hill (Burgess Bikes, bus services, car club vehicles, and other shared transport facilities) could be integrated within mobility hubs at Land West of Burgess Hill 's neighbourhood centre (and potentially at other key locations within Burgess Hill and emerging developments) to support a wider sustainable transport strategy at Burgess Hill, in line with MSDC and WSCC ambition to decarbonise transport and tackle key issues set out in the 'WSCC Local Transport Plan 2022 to 2036' such as climate change, local environmental impacts, development and regeneration pressure and opportunities, public health and well-being, access to services and transport network performance issues. Furthermore, WSCC has indicated support for a mobility hub within the development in their preapplication advice (see **Appendix D**), and has required a consistent approach to the design of the mobility hub with other schemes planned around Burgess Hill to ensure compatibility with the Shared Mobility App/ Mobility as a Service (see below). Ongoing discussions are being held with developers of other emerging sites, including the Science & Technology Park committed development and Sayers Common draft allocated site.

- **Shared mobility app/ MaaS:** Mobility as a Service (MaaS) is a term used to describe digital transport service platforms that enable users to access, pay for and get real-time information on a range of public and private transport options. As technology evolves and allows wider generation and sharing of data, there is an opportunity to deliver a shared mobility app or MaaS system for residents of Land West of Burgess Hill and wider Burgess Hill area. This could act as:

    - an intermodal journey planner, combining different modes of transport such as a 'Burgess Bikes' scheme, public transport (bus and rail services), car club and car sharing;

    - a single payment portal, whereby users can pay as they go or buy a 'service bundle' in advance; and

    - a booking system incorporating the entire end-to-end journey stages.

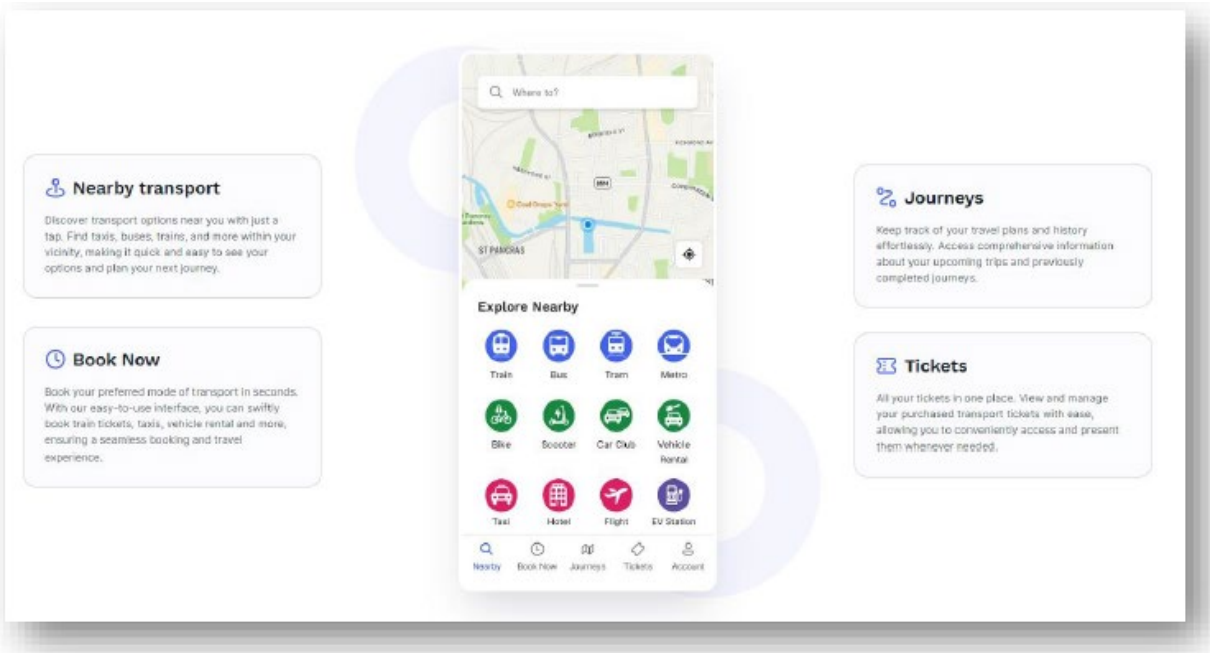
    Current UK examples of MaaS include Solent Transport (which includes Portsmouth, Southampton, South Hampshire and the Isle of Wight) is partnering with Trafi, Unicard and Behavioural Insights Team to deliver a multi city MaaS scheme. The app Whim in the West Midlands, and MaaS Scotland. Whim has been designed by Helsinki-based MaaS Global and offers a range of monthly plans, bringing in National Express, Transport for West Midlands, Gett, Nextbike and Enterprise, as transport providers. In 2019 Scotland embarked on the development of a National programme for MaaS, funded through the Scottish Government and supported by Transport Scotland.

    Discussions with Enterprise Mobility in 2024 have led to a better understanding of their MaaS current offer, and how this could be introduced to Land West of Burgess Hill. Known as 'Mobility as a Service and Ride sharing services', Enterprise Mobility offer:

    - A white labelled, customisable Mobility as a Service (MaaS) software application which covers all forms of transport (see **Figure 4.11** as example provided by Enterprise Mobility)

- Offering the most relevant mobility solutions in the area.
- Booking through mobile app.
- Mobility Credits can be loaded onto the MaaS platform for residents.
- Discounted preferential rates on all modes for residents available.
- Price to be provided on Application

Figure 4.11 - Enterprise Example Native App for MaaS Package



As indicated previously, WSCC has requested in the preapplication advice provided in June 2024 a *"consistent approach to the introduction of the Shared Mobility App/Mobility as a Service (MaaS) scheme with any other similar schemes that may be being proposed at any the other strategic sites planned around Burgess Hill, to ensure compatibility with the proposed car club and mobility hub."*

- **Travel Plan management and monitoring:** "*Infrastructure measures and new/upgraded services appear necessary but not sufficient to bring about change, and behavioural interventions in the absence of enabling infrastructure appear less likely to be successful*"[3]. Travel Plans provide a long-term management strategy for integrating proposed sustainable travel measures into the planning process, identifying:
  - Long-term aims, objectives and targets
  - Means and timescales for implementation
  - Strategies for monitoring and reviewing the effectiveness of the Travel Plan

  It is expected that, through the planning application process, Thakeham would enter into a Section 106 Agreement with MSDC for the Travel Plan to be implemented and monitored.

[3] Cycling and Walking Investment Strategy: investment inputs, outputs and outcomes (publishing.service.gov.uk)

- Travel Plan Coordinator (TPC): a TPC would be appointed to act as point of contact for residents of the development in terms of sustainable travel measures, and carry out monitoring and review on a regular basis. The TPC would be responsible for communicating with the site's community, promoting sustainable transport measures and initiatives and administering the travel incentives (see below).

- Informed traveller package: a bespoke document could be available to all residents of the development, including travel information/ planning/ booking payment tools (including shared mobility app/ MaaS) and other information with regard to sustainable travel options.

- Incentives: sustainable travel incentives could include the provision of vouchers that residents could use towards 'Burgess Bikes', cycle and walking equipment, public transport fares and/or homeworking equipment.

- **Monitor and Evaluation Plan (MEP):** to incentivise the delivery of the Land West of Burgess Hill Transport Vision (WBTV, see **Section 3**) and maximise active travel and public transport improvements (instead of highway mitigation), a MEP could be included in the S106 Agreement. WSCC has indicated in their preapplication response (see **Appendix D**) that the proposed MEP is welcomed, and requires that this includes the locations and methodology as well as the frequency of monitoring surveys. It is expected that the MEP will cover:

  - Appropriate transport infrastructure to be provided at the site at each stage of development, including earliest and latest delivery (or contribution) to transport infrastructure;

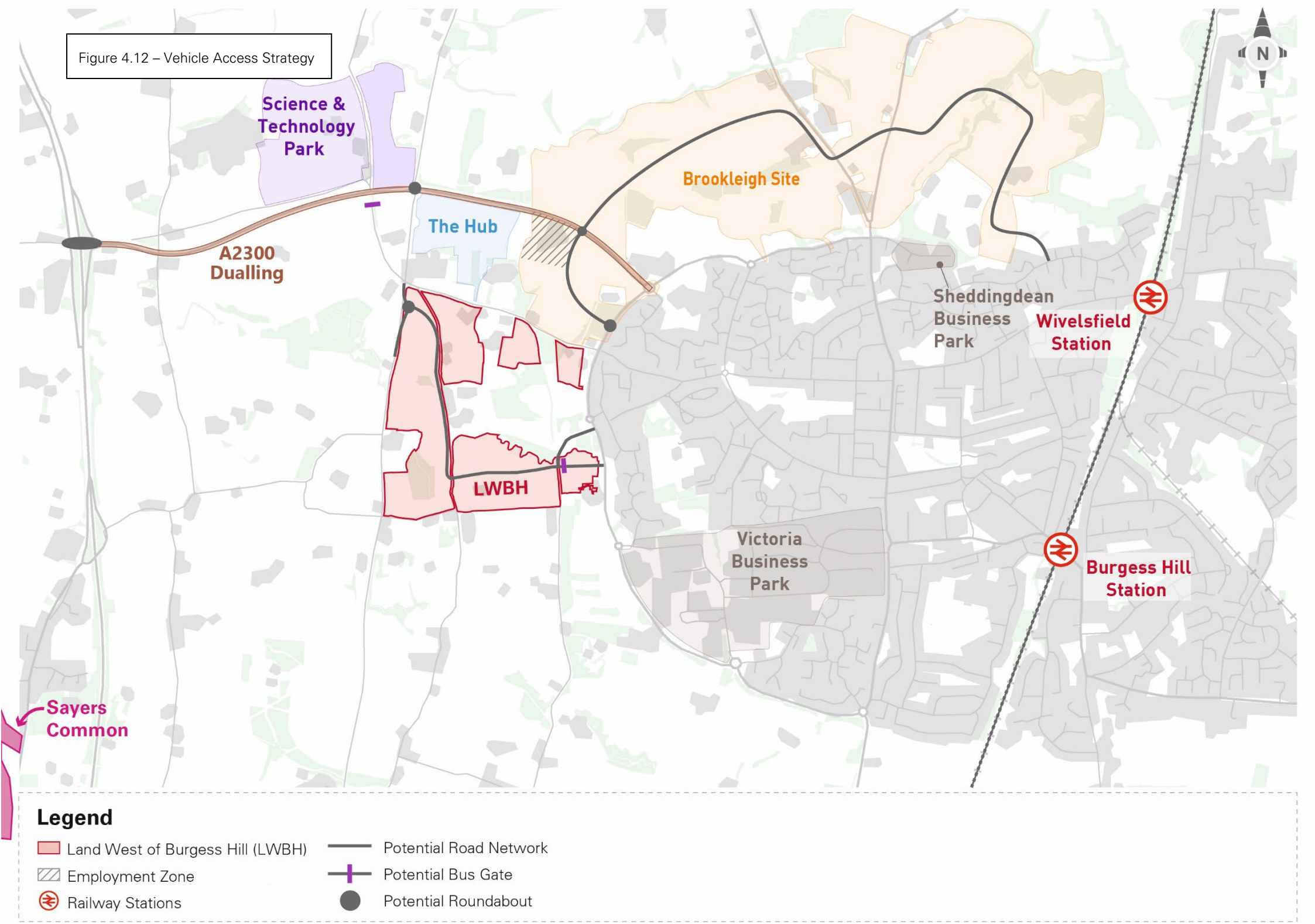
  - Locations and triggers for mitigation measures and target peak hour trip generation for each stage of development; and

  - Timing of the surveys and monitoring and evaluation reports, setting out the mechanisms to deal with any divergence from the targeted trip scenario (i.e. WBTV scenario) and associated transport infrastructure.

4.8 Vehicular Access Strategy

4.8.1 The vehicle access strategy is presented in **Figure 4.12** and described below.

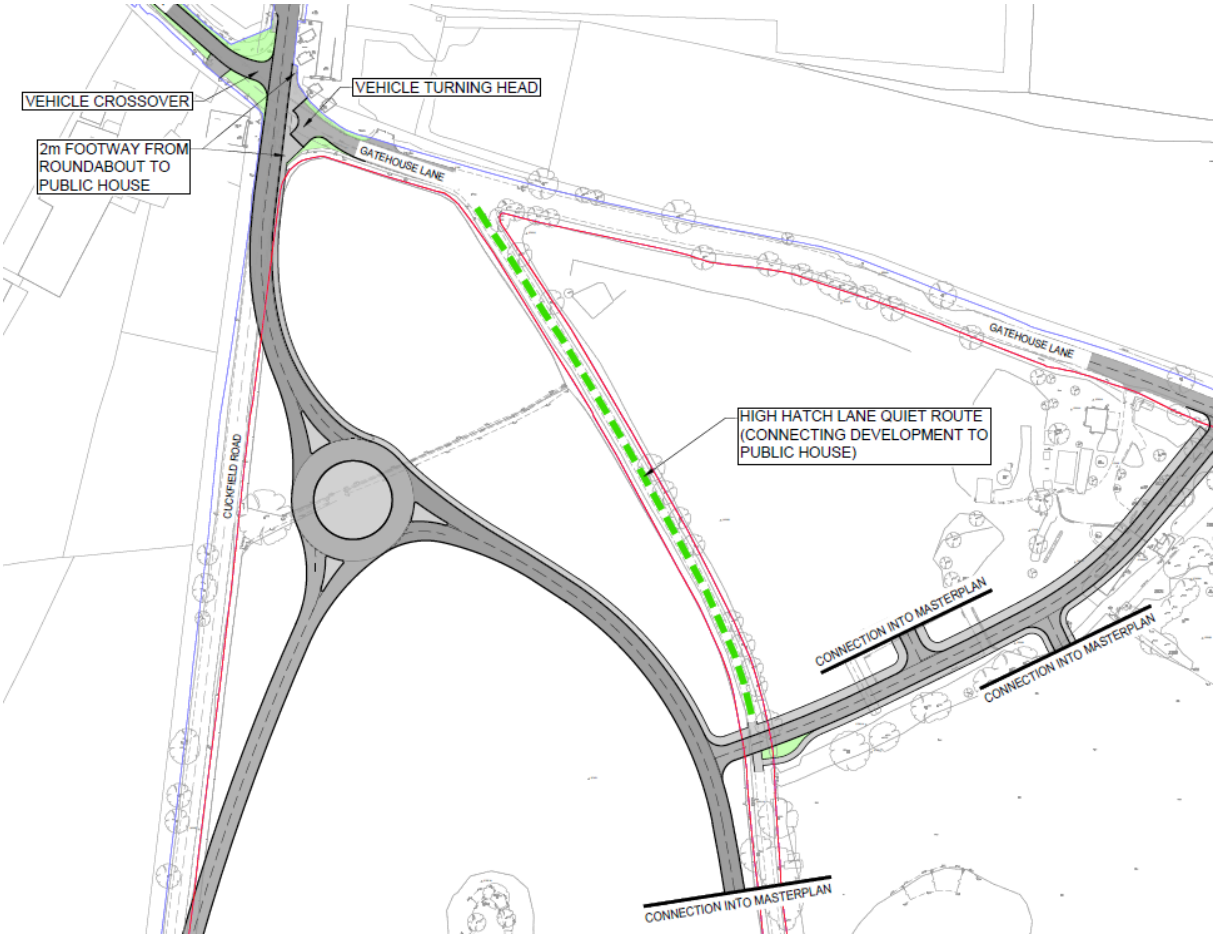
Figure 4.12 – Vehicle Access Strategy



4.8.2 The Primary access for vehicles is proposed via a new access roundabout located to the south of the existing A2300/ Cuckfield Road roundabout and south of the Gatehouse Lane/ Bishopstone Lane. A new roundabout will connect with the existing Cuckfield Road to the north and south, with an eastern arm of the roundabout providing access to the site forming the primary street through the development.

4.8.3 The aspiration is that Gatehouse Lane is connected into the development road, in order to simplify the Cuckfield Road/Gatehouse Lane junction. Opportunities to use the northern section of the existing Gatehouse Lane north of this junction as a bus route direct into the Science & Technology Park will be investigated (See previous **Figure 4.13**).

Figure 4.13 – Proposed Main Access



4.8.4 Secondary Access to the east on to the A273 will be as follows:

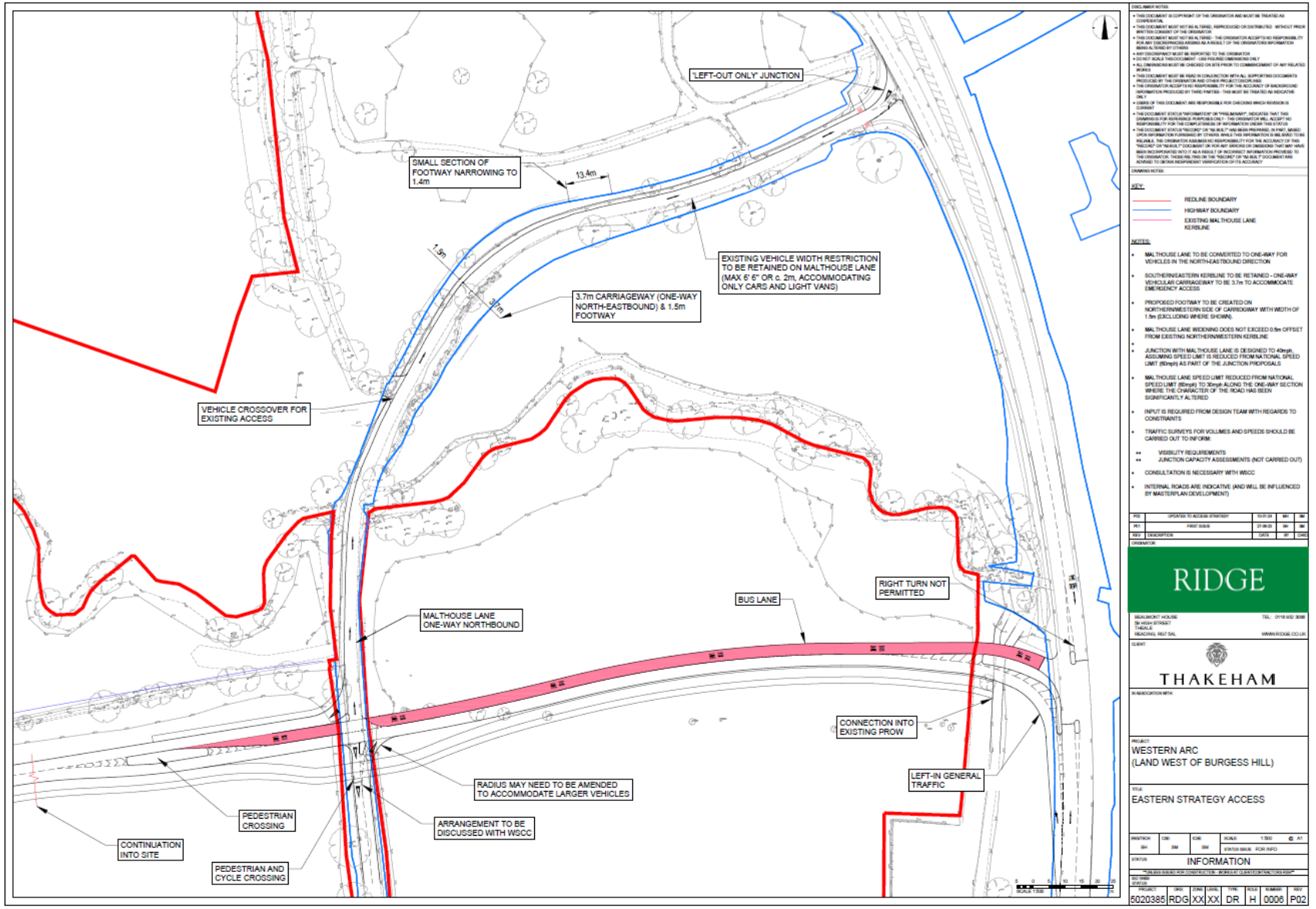
- Left-in / Bus-only exit junction at the A273 junction east of the eastern parcel, as shown in **Figure 4.14**. The road connecting Malthouse Lane and the A273 across the eastern parcel would comprise a bus lane in eastbound direction, and general traffic lane in westbound direction.

- Conversion of the northern section of Malthouse Lane to one-way northeast bound and the delivery of a new footway, as shown in **Figure 4.14**.

4.8.5 This proposed arrangement (which maintains a left-in left-out general traffic arrangement) has not been designed to increase capacity for vehicles, but seeks to:

- deliver a footway link to both the green circular route and to Jane Murray Way and into Burgess Hill;
- deliver bus priority;
- improve safety on Malthouse Lane, which is currently narrow with low visibility;
- help with resilience of the highway with regards to flood occurrence at the Pook Bourne Stream.

Figure 4.14 – Conversion of the Northern Section of Malthouse Lane to One-Way and a New Footway and Proposed Secondary A273 Left-In/ Bus Exit



4.8.6 WSCC has raised concerns regarding the provision of a general private motor traffic access onto the A273 and Malthouse Lane (other than the eastern parcel of the site), due to potential impacts on the A273/ B2116 Stonepound Crossroads, which is an air quality management area. WSCC has indicated that:

"The Transport Assessment should consider closely how the propensity of vehicles to route via the A273 London Road and Brighton Road through this junction can be minimised and also how the effects of such traffic impacts to the local population such as through severance or emissions can be effectively mitigated given the site constraints.

The principle of the bus gates, as identified in [**Figure 4.14**] *is supported, including them being located on new links, noting that TROs for bus gates have no guarantee of being successful, but this is less of a risk on new links than existing roads."*

4.8.7 The proposals do not increase the highway capacity for general traffic from the existing layout, as the junction remains left-in left-out, but the routes are separated to enable the delivery of a footway along Malthouse Lane and a bus priority lane and a new segregated foot and cycle way. The design provides improved pedestrian, cycle and bus connectivity and a secondary/emergency vehicle access.

4.8.8 The on-site transport network will designed to prioritise walking, cycling and bus services. Bus gates will discourage vehicle use.

4.8.9 Model outputs from the Mid Sussex Transport Model (Scenario 5) provided in August 2024 by the transport model operator (Systra) have been reviewed to understand the level of LWBH traffic expected to travel via Stonepound crossroads. The select zone analysis of Land West of Burgess Hill shows that the development only results in 10 additional two-way (i.e. in and out bound) movements at Stonepound junction in the AM peak hour and 19 additional two-way trips in the PM peak hour.

Figure 4.14 – AM Peak Hour Outbound Traffic Routing in Mid Sussex Transport Model (Scenario 5)

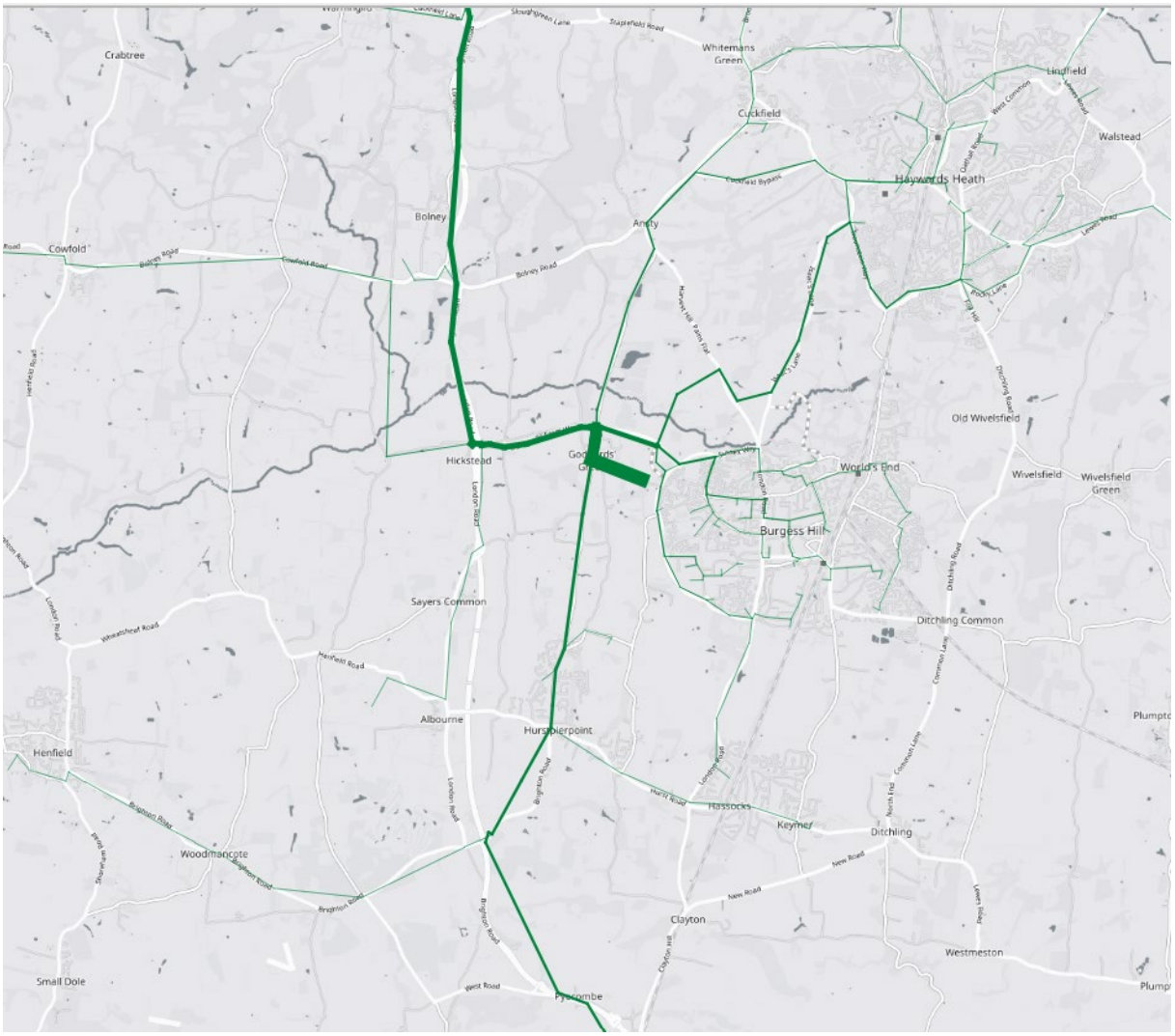


Figure 4.14 – PM Peak Hour Inbound Traffic Routing in Mid Sussex Transport Model (Scenario 5)

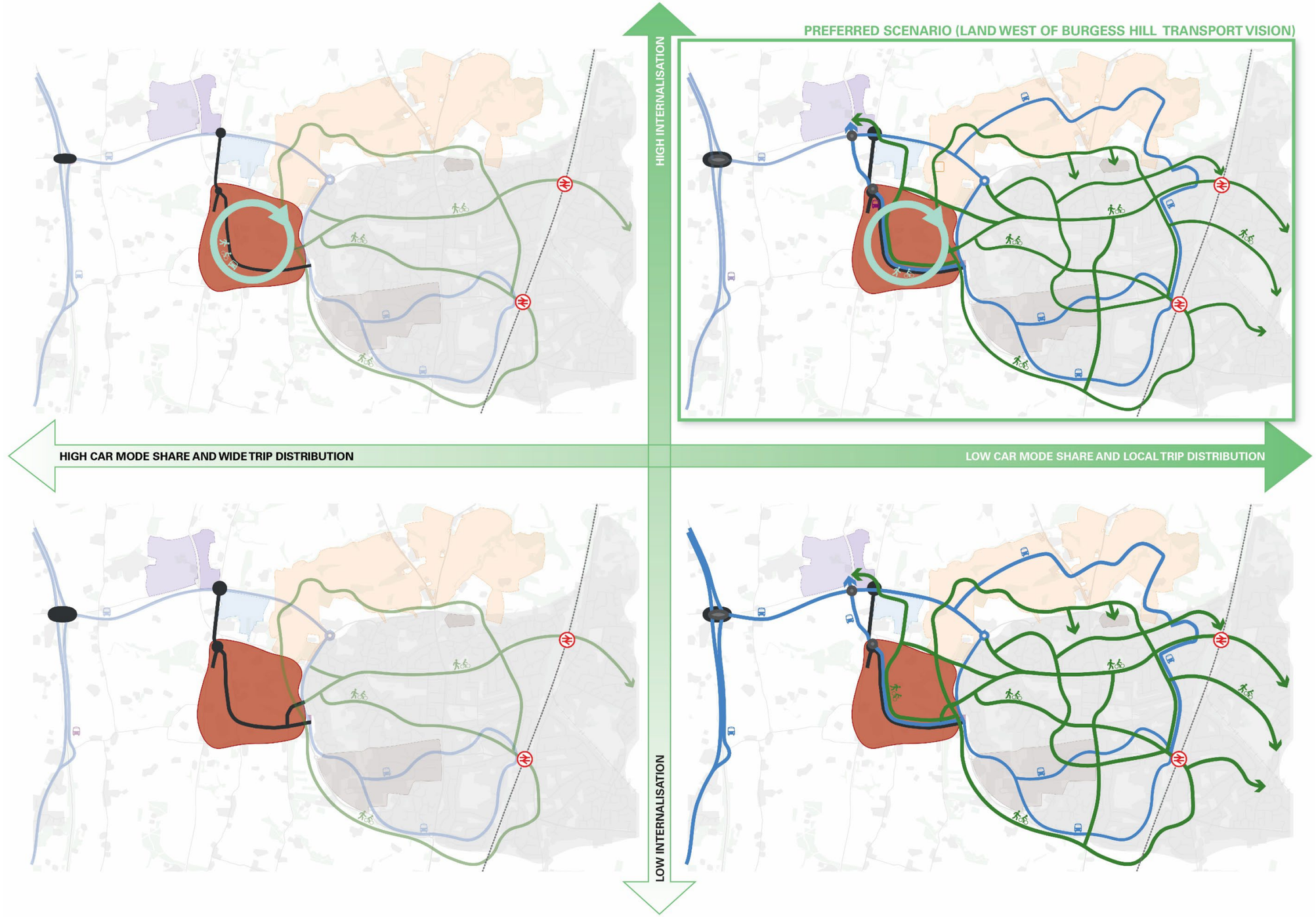
5 PRELIMINARY ASSESSMENT OF TRAVEL DEMAND

5.1 An Assessment Methodology to Help to Achieve the Vision

5.1.1 The July 2024 NPPF consultation draft sets a requirement for assessing sites that may be allocated for development in plans, to take a 'vision led' approach to promoting sustainable transport modes. This approach, also known as scenario planning, 'Decide & Provide' (D&P), or Vision & Validate (V&V) (as outlined in **Appendix A**), encourages that consideration is given to different possible, plausible and desired futures for a development/new community depending on how this is planned and designed, as well as other drivers of demand and factors (see **Appendix B**).

5.1.2 The D&P approach is to design the new community and supporting infrastructure to best enable the most desirable future, rather than delivering traditional investment which have generally led to less successful community life and greater environmental impacts.

Figure 5.1 – Working Towards a Preferred Scenario



5.2 Preliminary Assessment Methodology

5.2.1 This chapter provides a preliminary assessment of the likely travel demand associated with the residential element of the development. In line with paragraph 22 of the National Planning Policy Framework 2023 (and July 2024 consultation draft) to support the long-term vision of the development and West Sussex Local Transport Plan, an approach that accounts for uncertainty and opportunity has been adopted.

5.2.2 This preliminary assessment of travel demand was carried out in February 2024 out to reflect the aspirations of the Land West of Burgess Hill Transport Vision (WBTV), however this will be updated with the most up-to-date data sources and refined taking into account preapplication comments received from WSCC (see **Appendix D**) in the preparation of the Transport Assessment supporting the planning application for the site.

5.2.3 A separate assessment has been undertaken on the basis of a Business as Usual (BaU) approach which relies on forecasting techniques using historic travel trends as shown in **Figure 5.3**, which would lead to a non-preferred future for the development. The BaU assessment of likely travel demand has been included in **Appendix C**.

5.2.4 Key elements considered as part of the WBTV assessment, in contrast with the BaU approach are:

- **Trip generation:** a feasible reduction in people trips has been considered.
- **Trip purpose:** a feasible reduction in commuting trips associated with higher homeworking levels has been considered.
- **External mode share:** a feasible shift to active travel modes and public transport has been considered based on the Preliminary Transport Strategy presented in **Chapter 3**.

5.3 People Trip Generation (WBTV)

5.3.1 Due to the early stage in the development of the proposals, consideration has been given only to the residential people trip generation at the site. The trip generation associated with other land uses will be estimated at a later stage when further information with regard to the proposal is available, however this is expected to relate to:

- **People trips associated with the primary school** - it is expected that the majority of trips associated with the school will be generated by parents and children living on the site, these are considered as part of the residential people trip generation (primary education purpose) below. A small proportion of trips will be generated by staff and parents and children living outside the development, these will be considered at a later stage.
- **People trips associated with shops and other on-site facilities** - these facilities will be designed to cater to residents' needs, therefore it is expected that the majority of trips associated with these land uses will be generated by residents of the site, and have therefore been assessed as part of the residential trip generation (retail and other purposes). A very small proportion of trips might be generated by staff working at these facilities from off-site, these will be considered at a later stage.

Residential People Trip Generation

5.3.2 The methodology employed to estimate the likely trip generation of Land West of Burgess Hill based upon the Transport Vision is as follows:

- **Step 1 (BaU):** Trip rates have been extracted using the methodology employed as part of the BaU Scenario (see **Appendix A** for details).
- **Step 2 (WBTV Approach):** a trip reduction has been applied based on results from the NTS (see section 4.2), which show a reduction in all-purpose trips during the AM and PM peak period of 2% and 10% respectively.

5.3.3 Residential person trips rates and trips likely to be generated by the proposed residential element of the site are presented below:

Table 5.1 – Residential Trip Generation (Land West of Burgess Hill Transport Vision)

Time	Person Trip Rate (per dwelling)			Person Trips (1,350 homes)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way
AM Peak (08:00 - 09:00)	0.206	0.71	0.916	272	938	1,210
PM Peak (17:00-18:00)	0.53	0.287	0.817	647	350	997

Residential Trip Purpose

5.3.4 The methodology employed to estimate the likely trip generation (by purpose) of Land West of Burgess Hill Transport Vision (WBTV) is as per the BaU Scenario (see **Appendix C** for details).

5.3.5 The resulting trip generation (by purpose) under the Land West of Burgess Hill Transport Vision Scenario is presented below, both for the AM and PM peak periods.

Table 5.2 – AM Peak Residential People Trip Generation (Land West of Burgess Hill Transport Vision)

Purpose		Arr	Dep	2-way	Arr	Dep	2-way
Employment		1%	25%	20%	2	237	239
Education	0%	4%	3%	0	33	33	40
	0%	13%	10%	0	123	123	148
	0%	14%	11%	0	135	135	163
	0%	5%	4%	0	42	42	51
Education Escort	9%	4%	5%	24	35	59	60
	33%	14%	18%	89	131	219	223
	5%	2%	3%	15	22	36	37
	0%	0%	0%	0	0	0	0
Retail		8%	3%	4%	22	27	49
Other Personal Business and Escort		25%	9%	13%	69	87	156

Purpose	Arr	Dep	2-way	Arr	Dep	2-way
Visiting Friends / Entertainment / Sport	7%	2%	3%	18	23	41
Holiday / Day Trip / Other	12%	4%	6%	34	42	75
Total	**100%**	**100%**	**100%**	**272**	**938**	**1,210**

Table 5.3 – PM Peak Residential People Trip Generation (Land West of Burgess Hill Transport Vision)

Purpose		Arr	Dep	2-way	Arr	Dep	2-way
Employment		46%	6%	32%	296	21	317
Education	1%	0%	0%	3	0	3	4
	2%	0%	1%	13	0	13	14
	2%	0%	1%	14	0	14	15
	1%	0%	0%	4	0	4	5
Education Escort	1%	0%	0%	4	0	4	5
	3%	0%	2%	17	0	17	17
	0%	0%	0%	3	0	3	3
	0%	0%	0%	0	0	0	0
Retail		9%	18%	12%	57	65	122
Other Personal Business and Escort		14%	29%	19%	89	100	189
Visiting Friends / Entertainment / Sport		14%	30%	20%	94	105	199
Holiday / Day Trip / Other		8%	17%	11%	53	59	112
Total		**100%**	**100%**	**100%**	**647**	**350**	**997**

5.4 People Trip Internalisation

5.4.1 The internalisation of residential person trips of Land West of Burgess Hill reflecting the Transport Vision has been estimated using the methodology employed as part of the BaU Scenario (see **Appendix C** for details).

5.4.2 The total number of internal and external residential person trips are presented in the following table:

Table 5.4 – Residential Person Trip Internalisation (Land West of Burgess Hill Transport Vision)

Land Use	Time	Internal Person Trips			External Person Trips		
		Arr	Dep	2-way	Arr	Dep	2-way
Commuting	AM	0	0	0	2	237	239
	PM	0	0	0	296	21	317
Education	AM	0	107	107	0	228	228
	PM	11	0	11	24	0	24
Escort Education	AM	45	66	112	82	121	203
	PM	8	0	8	15	0	15
Retail	AM	11	14	24	11	14	24
	PM	29	32	61	29	32	61
Other Personal Business and Escort	AM	0	0	0	69	87	156
	PM	0	0	0	89	100	189
Visiting Friends / Entertainment / Sport	AM	0	0	0	18	23	41
	PM	0	0	0	94	105	199
Holiday / Day Trip / Other	AM	0	0	0	34	42	75
	PM	0	0	0	53	59	112
Total	AM	**56**	**187**	**243**	**216**	**751**	**967**
	PM	**48**	**32**	**80**	**598**	**318**	**916**

5.5 External People Trip Distribution

5.5.1 The assessment of external trip distribution has been carried out for each residential trip purpose, the assumptions made are presented below.

Employment / Other Personal Business/ Visiting Friends/ Other Trip Purpose

5.5.2 Residential people trips with an employment trip purpose have been estimated using Census 2011 Travel to Work (TTW) data, using as usual residence an area of Burgess Hill near where the site is located (MSOA Mid Sussex 012).

5.5.3 An adjustment to the TTW distribution has been made to reflect the likely draw of committed and planned employment areas within Burgess Hill located near the site i.e. Science & Technology Park and The Hub. A gravity model has been created using Victoria Business Park as reference, as follows:

Table 5.5 – Committed and Planned Employment Areas Gravity Model and Distribution

Employment Area	No jobs	Distance from site (m)	Gravity model	%
Victoria Business Park total	3,865	1,780	8,337	37%
Science & Technology Park	2500	1,640	5,854	26%
The Hub	1500	682	8,446	37%
Total	7,865			

5.5.4 The proportion of trips likely to be generated by the Science & Technology Park and The Hub have been compared against those shown in the TTW data for Victoria Business Park, and added to the residential people trip distribution with employment purpose.

5.5.5 The same distribution has been applied to trips with the following trip purpose, due to the lack of information with regard to these:

- Other personal business / Escort Trip Purpose
- Visiting friends/ Entertainment / Sport Trip Purpose
- Other Trip Purpose

Education and Education Escort Trip Purpose

5.5.6 A gravity model has been developed to estimate the likely distribution of children residing on site, this has been based on the available schools within the local area around the site and the capacity of these. The gravity model and distribution of children likely to attend nursery, primary and secondary schools is presented below:

Table 5.6 – Residential (Education and Education Escort Trip Purpose) External Trip Distribution

School	Type	Capacity	Distance from site (m)	Gravity Model	%
The Gattons Infant School	Infant (5-7)	269	1700	20	2%
Bolney CofE Primary School	Primary (4-11)	101	5500	26	2%
Twineham CofE Primary School	Primary (4-11)	88	4400	28	2%
Southway Junior School	Primary (7-11)	353	1900	263	23%
St. Wilfrid's Catholic Primary School	Primary (4-11)	418	2800	211	19%
London Meed Community Primary School	Primary (4-11)	391	3800	146	13%
Sheddingdean Community Primary School	Primary (4-11)	190	3000	90	8%
St. Lawrence CofE Primary School	Primary (5-11)	610	3500	247	22%
Burgess Hill Girls	Primary (2-11)	266.5	3600	105	9%
St. Paul's Catholic	Secondary (11-18)	1,123	1,200	1911	65%
The Burgess Hill Academy	Secondary (11-16)	949	3400	434	15%
Burgess Hill Girls	Secondary (11-18)	266.5	3600	105	4%
Dowlands Community School	Secondary (11-16)	1,195	5000	488	17%
Kiddi Caru Day Nursery	Nursery	158	1400	43	64%
Norto5 KIDZ	Nursery	30	2100	5	8%
Tiggywigs Childrens Day Nursery	Nursery	81	2700	11	17%
Mighty Saurus	Nursery	78	3800	8	12%

Retail Trip Purpose

5.5.7 The distribution of external residential people trips with a retail purpose has been carried out based on the MSDC Retail Study[4] carried out in May 2016. The distribution is expected to be as follows:

[4] https://www.midsussex.gov.uk/media/3224/ep40_retailstudy.pdf

Table 5.7 – Residential (Retail Trip Purpose) External Trip Distribution

Shopping Area	Adjusted Distribution
Haywards Heath Town Centre	0.3%
Burgess Hill Town Centre	35.3%
Hassocks	0.3%
Burgess Hill other shops	7.4%
Tesco, Jane Murray Way, Burgess Hill	49.0%
Sainsbury's, Bannister Way, Haywards Heath	2.9%
Brighton	2.4%
Crawley	1.7%
Lewes	0.6%

5.5.8 **Figures 5.2 – 5.5** illustrate the distribution of external residential person trips for each purpose. It should be noted that:

- AM Departures distribution has been presented for trips with employment/ business/ other, and education and escort education trips, as these are representative of when people travel the most with these purposes.
- Similarly, PM Departures have been presented for trips with retail purpose, as these are representative of when people travel most with this purpose.

Figure 5.2 – Residential (All Purpose) AM Departures

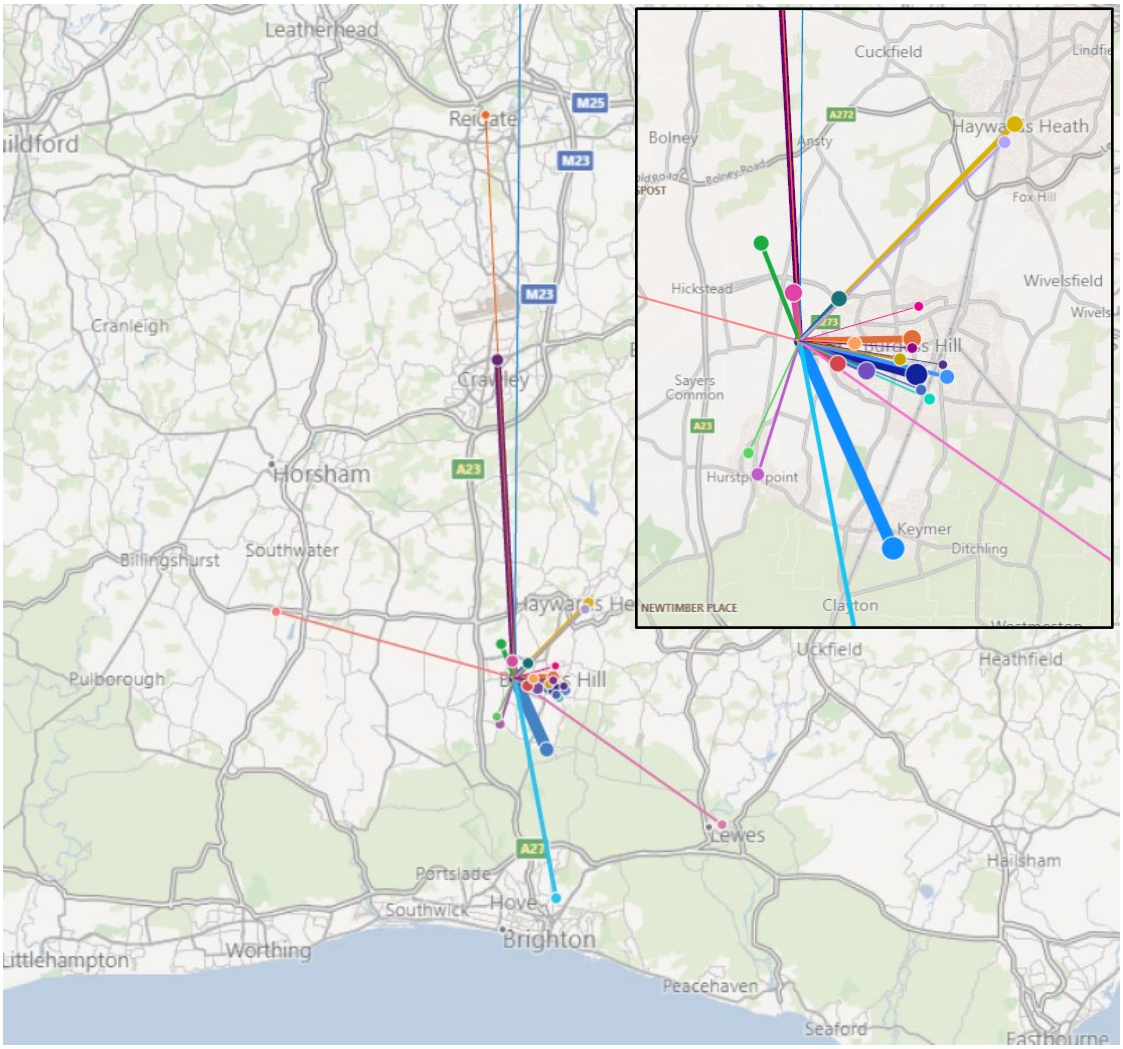


Figure 5.3 – Residential (Employment/ Business/ Other) AM Departures

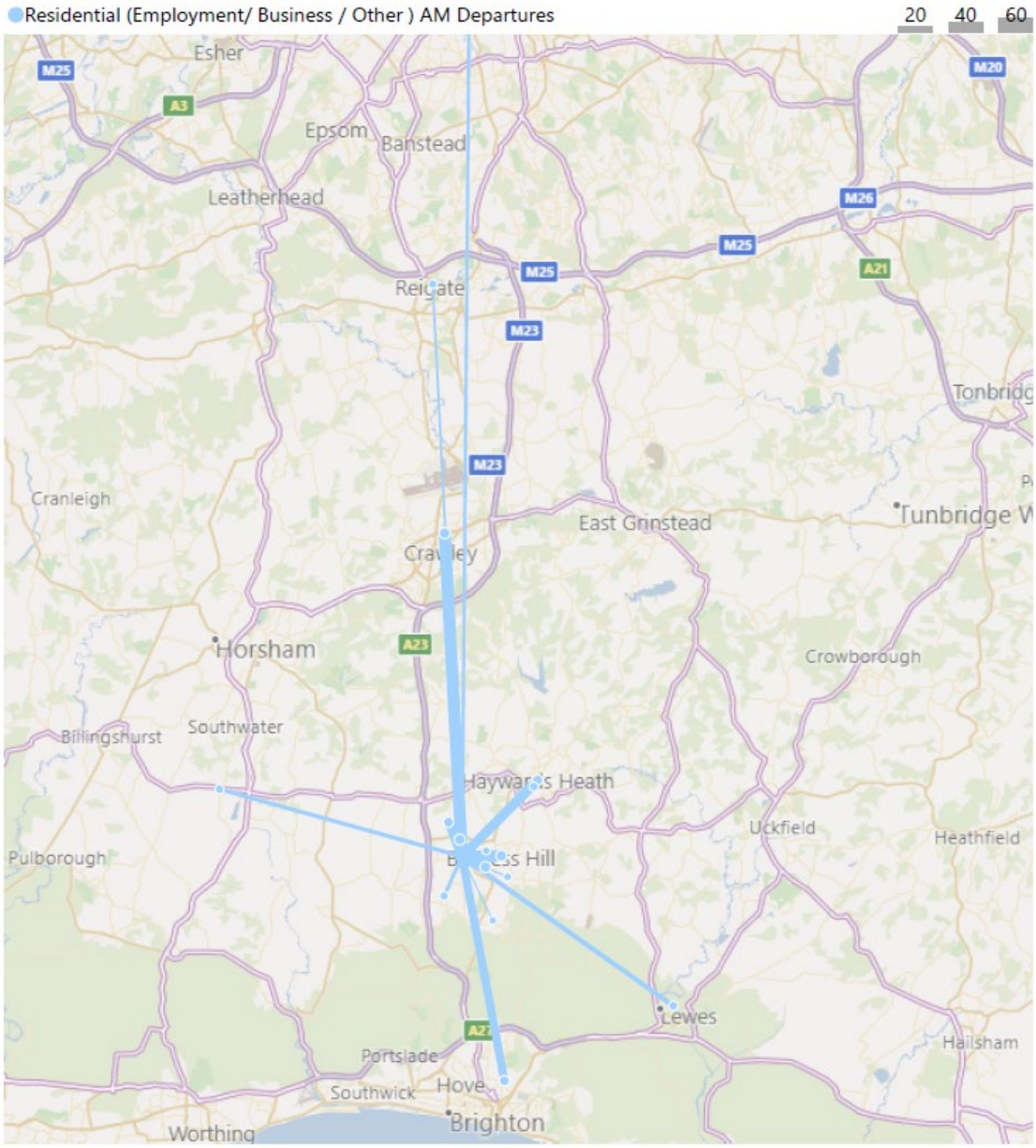


Figure 5.4 – Residential (Education & Escort) AM Departures Distribution

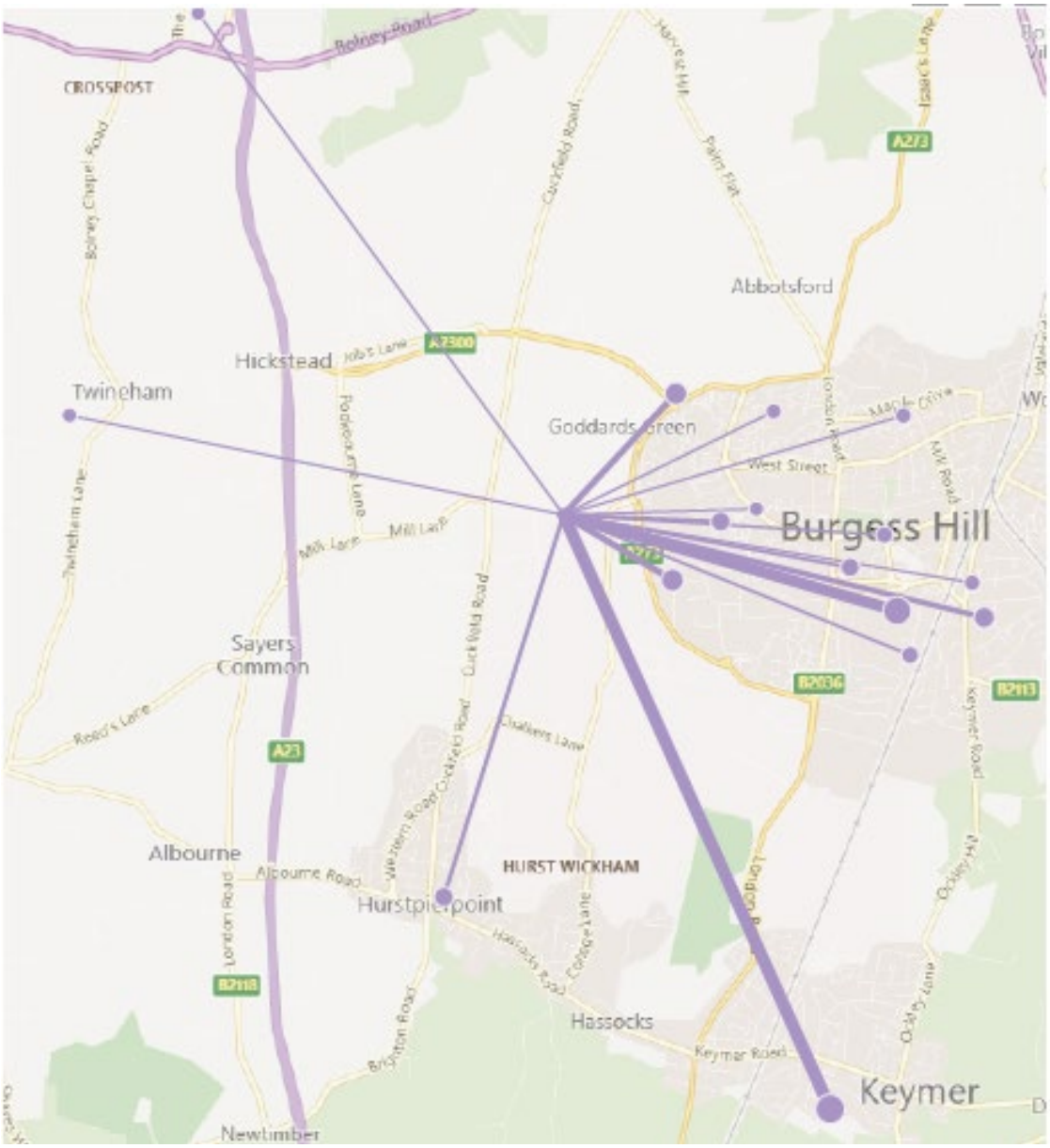
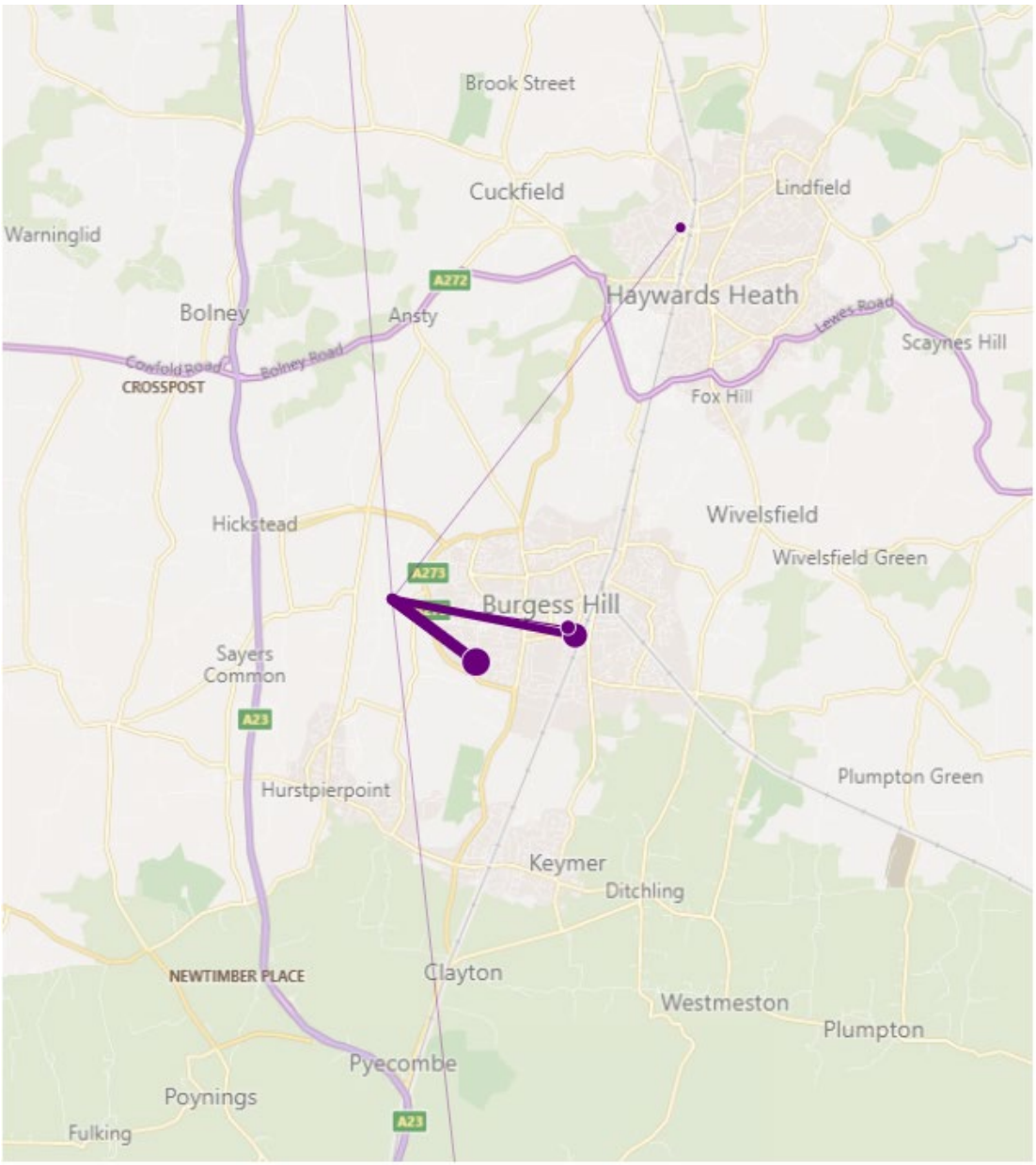


Figure 5.5 – Residential (Retail) PM Departures



5.6 External People Mode Share

5.6.1 The assessment of external trip mode share has been carried out for each residential trip purpose, as follows:

- **Step 1 (BaU):** the assessment of external trip mode share under the BaU Scenario has been carried out for each residential purpose, as follows (see **Appendix C** for further details):
    - **Employment/ Other Personal Business/ visiting Friends/ Other Trip Purpose:** estimated using Census 2011 Travel to Work Data, using as usual residence an area of Burgess Hill near where the site is located (MSOA Mid Sussex 012). Mode share associated with the area of Victoria Business Park has been used as the basis to estimate mode share to the Science & Technology Park and The Hub.

- **Education and Education Escort Trip Purpose:** estimated using Travel Plan data for Twineham CofE Primary School and St. Wilfrid's Catholic Primary school publicly available.

- **Retail Trip Purpose:** assumed to all be made by car (either car driver or car passenger).

- **Step 2 (WBTV):** the BaU external mode share of residential trips has been adjusted to account for increased levels of active travel and public transport use associated with the Transport Vision and implementation of the Preliminary Transport Strategy presented in **Section 3**. Details of this methodology are presented below.

Active Travel (Short - Medium Trips)

5.6.2 The effects of the Preliminary Transport Strategy on mode shift for active travel (walking, cycling and wheeling) from the BaU scenario have been estimated based on the following:

- "The Effects of Smarter Choice Programmes in the Sustainable Travel Towns" report (see para A.1.12) demonstrates that through a targeted approach to promoting and providing sustainable travel options, a reduction in distance travelled by car can be achieved as shown in **Table A.2**.

- Furthermore, research on the 'Effects of E-bikes on Bicycle Use and Mode Share'[5] has shown that cycling among people with access to an e-bike is likely to deliver a mode shift towards cycling. Car trip reductions presented in **Table A.2** have been adjusted to reflect the increase in distance cycled, as a result of having access to an e-bike, as presented in the e-bike study. The adjusted car trip reductions are, for each key destination, as follows:

Table 5.8 – Effects of Smarter Choice Programmes Adjusted to Reflect Access to E-Bikes

	Up to 2km	2 – 5.5km	5.5km – 9km
Car trip reduction	-22%	-14%	-10%

Public Transport (Medium – Long Trips)

5.6.3 As shown in **Figure 4.8**, the Preliminary Transport Strategy for the Land West of Burgess Hill relies upon the promotion and delivery of public transport improvements, particularly enhanced and new bus services. At the time of undertaking the assessment, the Mobility Strategy[6] prepared for the Science & Technology Park in November 2020 was applied to quantify the effects of these improvements on mode share. The assessment will be updated to reflect the emerging 'Bus Strategy', the current proposals are presented in **Section 4.3**. This update will be included in the Transport Assessment supporting a future planning application.

5.6.4 The Science & Technology Park Mobility Strategy considers the following improvement options:

- Bus 273 diversion to serve Science & Technology Park – this service provides one bus in each of the AM and PM peak periods between Brighton and Crawley.

- Bus 100 improvement to increase frequency from three buses during peak hours, to four.

[5] Fyhri, A.., Fearnley, N., 2015, Effects of e-bikes on bicycle use and mode share, Transportation Research Part D. Available at: Effects of e-bikes on bicycle use and mode share - ScienceDirect

[6] 20201119-project-newton-mobility-strategy-full.pdf (midsussex.gov.uk)

- Fastway to Crawley (extension of Fastway route 20 or new service) – the viability study has assumed two options, one with four buses per hour in the peak periods and another option with three buses per hour in the peak periods.

- Brookleigh Bus (new service that could be extended to Science & Technology Park) – the viability study has identified the need for 15-min frequency buses (additional hourly service to that proposed as part of the Brookleigh Public Transport Strategy).

5.6.5 The document estimates that, based on the above improvements, trips between the Science Park and certain key locations would switch to bus as follows:

- Burgess Hill: 50% shift from car to bus

- Brighton 25% shift from car to bus

- Haywards Heath: 25% shift from car to rail

- Crawley: 10% shift from car to bus

Overall Effects

5.6.6 Based on the above research, a car trip reduction has been applied to short-medium external residential trips as follows:

Table 5.9 – Active Travel Adjustments

Area	MSOA/ LSOAs affected	Combined Effect	Rationale
The Hub	Disaggregated as shown in **Table A.10**	75% shift from car driver to active travel	Due to the close proximity of these destinations to the site
Science & Technology Park		50% shift from car driver to active travel	
Victoria Business Park	MSDC 012C – 012D MSDC 015A – 012D MSDC 013 MSDC 014 MSDC 015A – 015B MSDC 016B- 016E	50% shift from car driver to: • 22% active travel • 28% public transport	**Table 4.6** above
Burgess Hill			
Haywards Heath	MSDC 008 MSDC 009 MSDC 010	25% car trip reduction to public transport	S&TP Mobility Strategy (indirect effect on rail as a result of improved bus connectivity to Burgess Hill)
Crawley	Crawley 001C Crawley 004	25% car trip reduction to public transport	S&TP Mobility Strategy (Fastway - increased to reflect

Area	MSOA/ LSOAs affected	Combined Effect	Rationale
	Crawley 005 Crawley 011 Crawley 013		targeting of areas served by Fastway)
Brighton	Brighton 003 Brighton 004 Brighton 011 Brighton 014 Brighton 015 Brighton 020 Brighton 022 Brighton 024 Brighton 027 Brighton 029 Brighton 030 Brighton 031	25% car trip reduction to public transport	S&TP Mobility Strategy (service 273 + new Fastway)
Hassocks	MSDC 017	50% shift from car driver to: • 14% active travel • 36% public transport	Effects of Smarter Choices Programme (active travel) + S&TP Mobility Strategy (bus 273)
Horsham	Horsham 005 Horsham 006 Horsham 007 Horsham 010 Horsham 012 Horsham 013 Horsham 015 Horsham 016	25% car trip reduction to public transport	S&TP Mobility Strategy (100 bus service improvement)

Multi-Modal External Residential Trip Generation

5.6.7 The multimodal external trip generation of residential trips, based on the adjustments presented in **Table 5.9** with regards to mode share, is presented below in **Table 5.10**:

Table 5.10 – Multi-Modal Trip Generation (Land West of Burgess Hill Transport Vision)

Time Period	Direction	Car Driver		Active Travel		Public Transport		Other		Total	
		No	%	No	%	No	%	No	%	No	%
AM	Arr	133	64%	36	17%	30	15%	8	4%	207	100%
	Dep	298	40%	141	19%	164	22%	147	20%	750	100%
	2-W	**432**	**45%**	**177**	**18%**	**194**	**20%**	**155**	**16%**	**958**	**100%**
PM	Arr	276	47%	150	25%	121	20%	45	8%	592	100%
	Dep	151	48%	80	25%	66	21%	21	6%	317	100%
	2-W	**427**	**47%**	**230**	**25%**	**187**	**21%**	**66**	**7%**	**910**	**100%**

5.6.8 A table comparing the multi-modal trip generation presented above (WBTV Approach) and the BaU multi-modal trip generation presented in **Table 5.11**, is shown below:

Table 5.11 – Change in Multi-Modal Trip Generation (Land West of Burgess Hill Transport Vision vs BaU)

Time Period	Direction	Car Driver		Active Travel		Public Transport		Other		Total	
		No	%	No	%	No	%	No	%	No	%
AM	Arr	-39	-14%	7	4%	19	10%	-1	0%	-14	0%
	Dep	-71	-8%	49	7%	103	14%	-91	-11%	-18	0%
	2-W	**-111**	**-10%**	**58**	**6%**	**115**	**12%**	**-92**	**-9%**	**-30**	**0%**
PM	Arr	-141	-16%	18	5%	61	11%	-15	-1%	-70	0%
	Dep	-78	-17%	10	5%	38	13%	-4	-1%	-35	0%
	2-W	**-222**	**-17%**	**27**	**5%**	**96**	**12%**	**-15**	**-1%**	**-104**	**0%**

5.6.9 **Table 5.11** shows a significant reduction in car driver trips (-111 two-way car driver trips in the AM, -222 in the PM) is expected, as a result of the implementation of the Land West of Burgess Hill Transport Vision.

5.6.10 It is expected that car driver trips would shift to other modes, resulting in a higher number of active travel trips (+58 two-way trips in the AM and +27 two-way trips in the PM) and public transport trips (+115 two-way trips in the AM and +96 two-way trips in the PM).

5.7 Travel Demands

5.7.1 The figures show the resultant travel demands of the developments in **Figure 5.6** and **5.9**

Figure 5.6 – Development Travel Demand – Active Travel Desire Line Plots (AM)

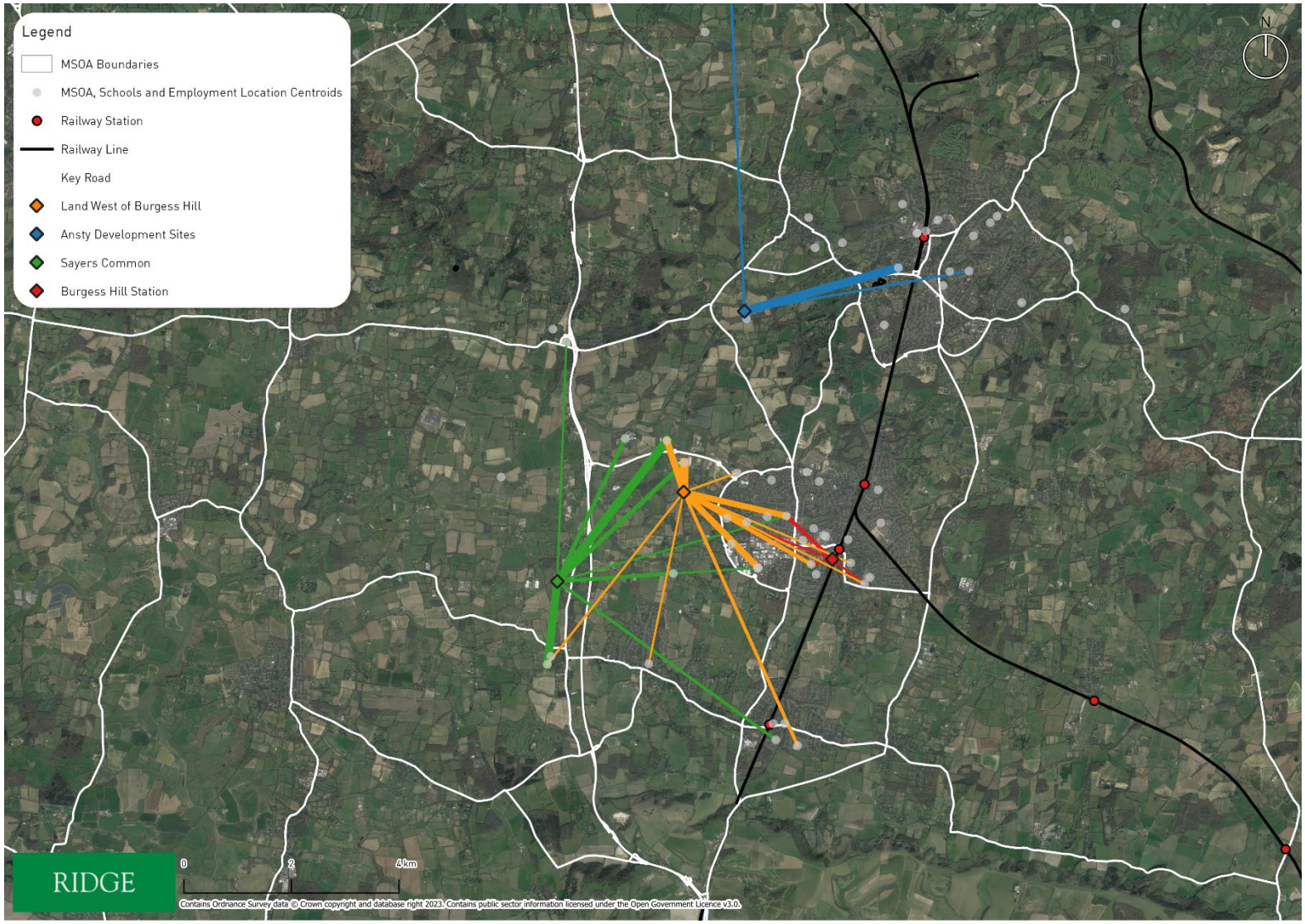


Figure 5.7 – Development Travel Demands – Public Transport Desire Line Plots (AM)

Figure 5.8 – Development Travel Demands – Car Driver Desire Line Plots (AM)

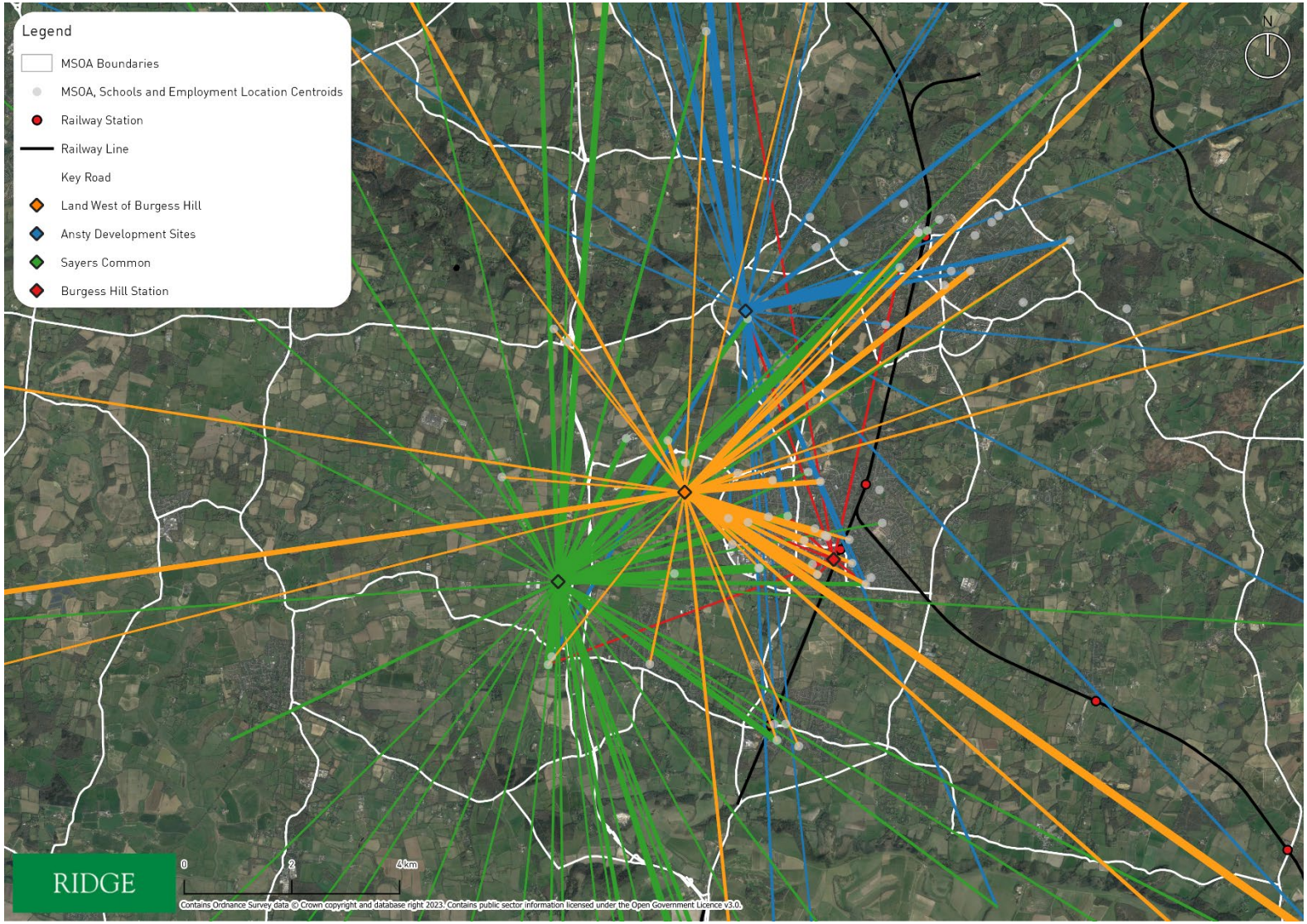
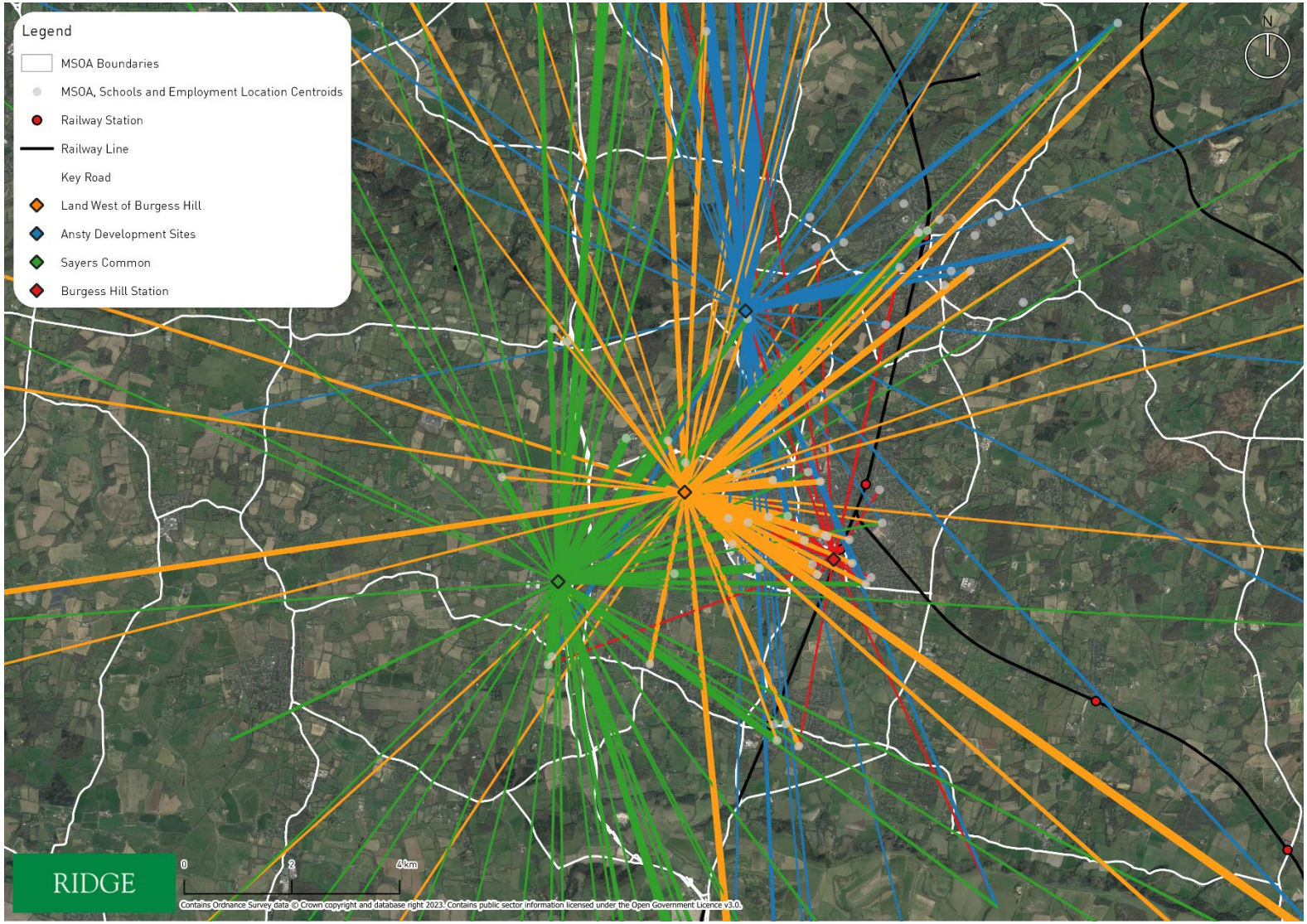


Figure 5.9 – Development Travel Demands – Person Trip line Plots (AM)



5.7.2 The plots show there is significant opportunity to encourage a greater shift from car driver to active travel and public transport, with the transport improvements that include new and improvement walk and cycle links and bus services through the development.

5.7.3 The development traffic has been assigned to the highway network based upon existing peak hour travel times in the AM and PM peak hours. The assignment is presented in **Figures 5.10** and **5.11**.

Figure 5.10 – OmniTRANS Assignment Plots (AM)

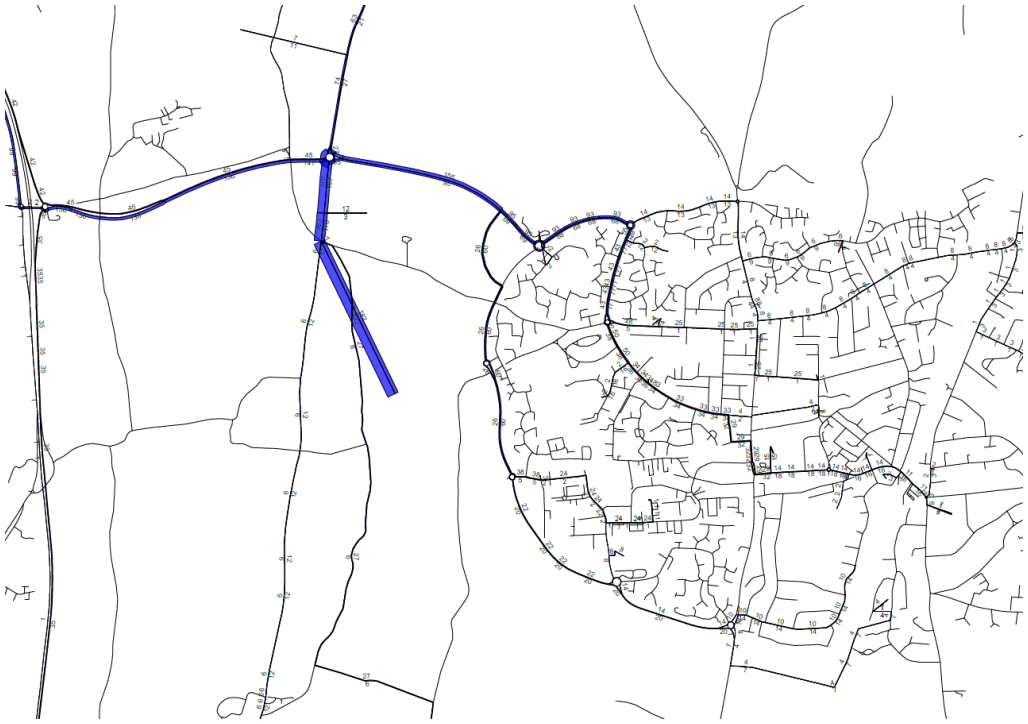
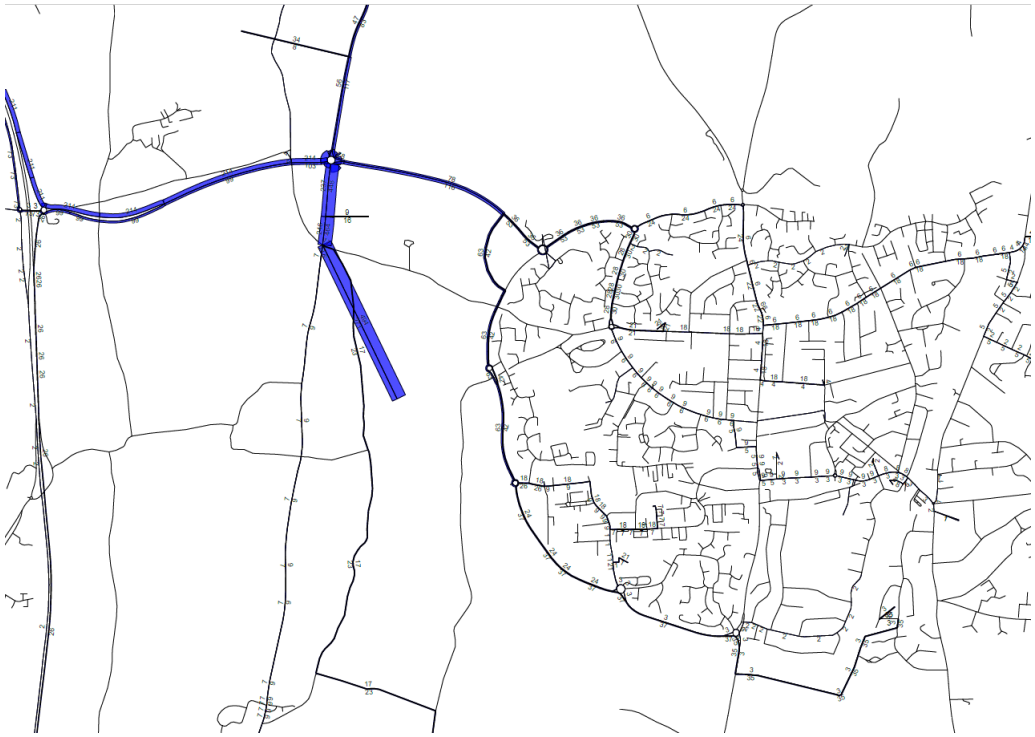


Figure 5.11 – OmniTRANS Assignment Plots (PM)



5.7.4 This demonstrates that there will be minimal impact of the rural roads.

6 SUMMARY & CONCLUSIONS

6.1 Summary

6.1.1 This report has been prepared to support the allocation of the Land West of Burgess Hill residential development at Land West of Burgess Hill within the new Mid Sussex District Plan.

6.1.2 The proposed development site is located to the west of Burgess Hill, between Cuckfield Road and the A273 Jane Murray Way and just south of the A2300 and the Hub and Brookleigh (previously known as Northern Arc) developments. The proposals currently being considered are for approximately 1,350 residential dwellings, a primary school, and other on-site facilities including shops and community spaces.

6.1.3 The site offers excellent opportunity to deliver a smart, connected, sustainable and attractive new community given its proximity to the adjacent town, facilities and planned employment ('The Hub' and 'Science and Technology Park' on the A2300).

6.1.4 The site is connected to Burgess Hill and the local area by means of a comprehensive network of Public Rights of Ways and cycle routes for cyclists, pedestrians and/or equestrians can access. Additionally, MSDC and WSCC in partnership with Coast to Capital LEP, are delivering a package of sustainable transport improvements in Burgess Hill as part of the Place and Connectivity Programme, which includes:

- Enhancement of existing and new pedestrian and cycle routes within Burgess Hill, including both railway stations, town centre, and Victoria Business Park, and connecting with the wider area
- Bus infrastructure improvements, including enhancement to bus services and bus stop infrastructure.
- Cycle parking improvements at key recreational locations within Burgess Hill.
- Improvements to the A2300, including active travel improvements to encourage walking, cycling and wheeling along this key corridor.

6.1.5 The proposed transport strategy for Land West of Burgess Hill has been developed taking into account the proximity of the site to the local facilities and employment areas in Burgess Hill and availability of existing and potential active travel links and public transport services that could be used by residents. This strategy has been identified based upon discussions with the following parties and will likely evolve with ongoing discussions and assessment:

- Local developers: the Science & Technology Park and Sayers Common's developer and their transport consultants
- Transport operators: bus operators, car club operators and bike share/ cycle hire operators.
- Local planning and highways authorities: MSDC and WSCC.

6.1.6 This document has been updated in August 2024 to consider:

- the preapplication advice provided by West Sussex County Council (WSCC) in June 2024, in response to the 'Land West of Burgess Hill Transport Scoping Report' issued in April 2024. See response in **Appendix D**.

- discussions held with transport operators regarding the emerging Mobility Strategy for the site.

6.1.7 The proposed transport strategy would be supported by a package of measures and initiatives to encourage residents to make the most sustainable choice when travelling outside of the development, which include:

- High-quality pedestrian and cycle infrastructure, including a comprehensive network of walk and cycle links connecting the site with:
    - Burgess Hill Town Centre
    - Key employment: The Hub, the Science & Technology Park
    - Sayers Common draft allocated development (and proposed secondary school).
    - The Green Circle, which connects with the Brookleigh site, to the north, and employment and shopping facilities to the south of Burgess Hill.
- 'Burgess Bikes' cycle hire scheme;
- Public transport service improvements, including:
    - extension of Fastway to Burgess Hill or diversion of Metrobus service 273 (if Fastway is not delivered); and
    - diversion of Compass Travel bus service 100.
- Possible bus priority improvements at:
    - Bishopstone Lane to the west of Cuckfield Road across the A2300, to connect with the Science & Technology Park for a possible future Fastway 20 extension.
    - Gatehouse Lane/Bishopstone Lane/Cuckfield Road junction, by simplifying the current arrangement to reduce delays for bus services.
    - Left-in / Bus-only exit junction at the A273 junction east of the eastern parcel
- Car Club scheme, and
- Supporting measures, including:
    - Mobility hub,
    - Shared mobility app/ MaaS,
    - Travel Plan management and monitoring, and
    - Monitoring and Evaluation Plan.

6.1.8 Primary access for vehicles is proposed via a new access roundabout to be located to the south of the existing A2300/ Cuckfield Road roundabout and south of the Gatehouse Lane/ Bishopstone Lane. A new roundabout will connect with the existing Cuckfield Road to the north and south, with an eastern arm of the roundabout providing access to the site forming the primary street through the development.

6.1.9 The preliminary assessment of travel demand generated by residents of the proposed development has been carried out using the Vision-led approach endorsed by DfT and the July 2024 NPPF consultation draft, which is based around the idea of developing a comprehensive vision of the development (Land West of Burgess Hill Transport Vision) and identify how transport should contribute to deliver this, particularly in terms of major investments and other supporting measures.

6.1.10 The preliminary travel demand assessment provides the forecast travel demand of Land West of Burgess Hill and other growth. This demonstrates the opportunity for residents at Land West of Burgess Hill to travel by sustainable travel, particularly active travel.

6.1.11 The forecast development traffic assignment to the highway network based upon existing peak hour travel times in the AM and PM peak hours demonstrates that there is minimal impact of the rural roads.

Conclusion

6.1.12 Land West of Burgess Hill Transport Vision is to create a new sustainable community, implementing the NHS Healthy New Towns principles, underpinned by the following principles:

- Healthy Living
- Sustainable Transport
- Homes for All
- Supporting Economic Growth
- Infrastructure Led
- Carbon Neutrality
- Biodiversity
- Education

6.1.13 Land West of Burgess Hill offers an excellent opportunity to deliver a smart, connected sustainable and attractive new community that can deliver Thakeham's vision to create a low-carbon development.

6.1.14 This preliminary Transport Strategy has been prepared to inform the Council's transport evidence to demonstrate how the development contributes or addresses the following:

Table 6.1 – Land West of Burgess Hill – Criteria and Policy

Criteria	Argument/ Conclusion	Strategic Objectives							District Plan Policies			
		1	5	6	8	9	12	14	DPS6	DPT1	DPT4	DPI1
Mix of uses and appropriate quantum to reduce the need for external trips and promote local living	✓ The site will include a primary school, and other on-site facilities including shops and community spaces and is in close proximity to The Hub, Science & Technology Park, Brookleigh, Victoria Business Park and Town Centre. Potential for a coordinated approach and collaboration with Brookleigh and Science & Technology Park to deliver high-quality placemaking which supports the 20-minute neighbourhood principles.	✓			✓ (local area)		✓		✓	✓		✓
Spatial framework to support compact & walkable communities & local living. Pedestrian and active travel priority and segregated design where possible	✓ The development will be designed to be compact and walkable with a comprehensive network of high-quality segregated walk and cycle links. Green travel corridors within the site will exploit the potential for High Hatch Lane as a pedestrian/cycle priority Quiet Lane and will integrate and enhance the existing PRoW which cross the site. Potential to retain and enhance the historic routeways of High Hatch Lane and Pangdean Lane Potential to support delivery of a shared route with other allocated sites at Sayers Common and links to employment uses centred around the A2300 and Brookleigh.	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Connect to district wide active travel networks (LCWIP)	✓ The site network will connect into the wider active travel network including 'Green Circle'. The 'Burgess Bike' cycle hire scheme is proposed to help maximise the use of this network providing residents and visitors/employees access to peddle bikes and E-bikes (and potentially cargo and assisted bikes).	✓	✓	✓			✓	✓	✓	✓	✓	✓
Development densities and layouts to support effective and efficient public transport operations and access	✓ Opportunity to route bus services through the site to connect Science & Technology Park, The Hub, Land west of Burgess Hill to town centre and railway station.	✓		✓		✓	✓	✓			✓	✓
Flexible parking provision to support broader strategies	✓ There is flexibility in the delivery of parking provision with measures such as car share and liftshare available to reduce parking requirements, as well as investment in placemaking, active travel and public transport.	✓		✓							✓	
Move away from "Predict & Provide" design philosophy	✓ The strategy is based upon a more aspirational vision for the development, evidence has been provided as to how this could be achieved.	✓								✓	✓	
Rigorous scenario evaluations to support decision making low/medium/high public transport modal split	✓ At this stage a business as usual and a Land West of Burgess Hill Vision scenario have been tested. Furthermore aspirational and alternative scenarios will be considered at the next stage.	✓								✓	✓	
Maximise use of existing road capacity and transport services	✓ This development benefits from the investment made in the A2300 and planned public transport investment for The Hub, the Science & Technology Park, Brookleigh (previously known as Northern Arc) and the Place and Connectivity Programme	✓		✓							✓	✓
Combined Criteria	**Meets all 'transport related' strategic objectives and district plan policies**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Strategic Objectives

- 1 - Sustainable Development and Adaptation to Climate Change
- 5 - Create and Maintain Green Infrastructure
- 6 - Infrastructure to Support Sustainable Communities
- 8 - Opportunities to Live and Work within Communities
- 9 - Create and Maintain Town and Village Centres
- 12 - Support Safe, Healthy and Inclusive Communities
- 14 - Create Accessible Environments

District Plan Policies

- DPS6: Health and Wellbeing
- DPT1: Placemaking and Connectivity
- DPT4: Active and Sustainable Travel
- DPI1: Infrastructure Provision

APPENDIX A TRAVEL TRENDS

A1 TRAVEL TRENDS

Introduction

A.1.1 There have been some changing trends in the travel. Some key changes are discussed below.

Emerging Trends

Changing Trends in Travel

A.1.2 People under 60 are travelling less than before; young people are learning to drive later and are making fewer trips by car.

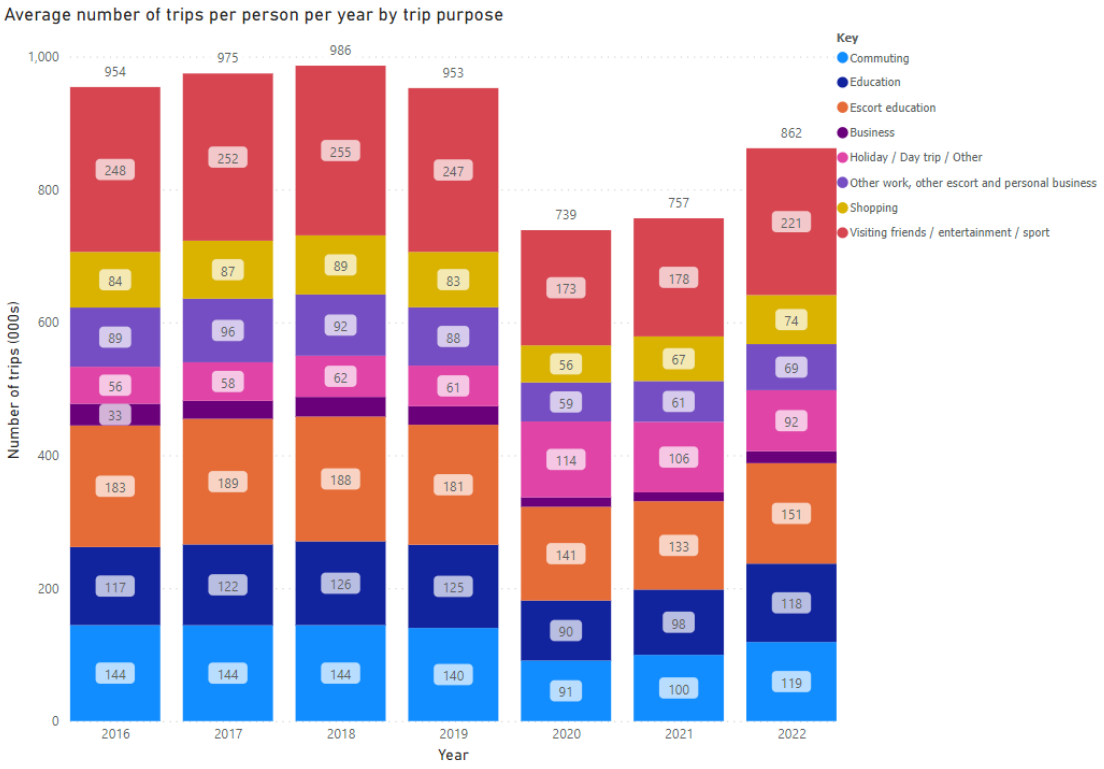
A.1.3 The reasons why people's travel is changing is due to; changes in working patterns, climate change and wellbeing awareness, and advances in technology, with commuting and shopping trips seeing a decline over the most recent years.

National Travel Survey (NTS) 2022[7]

Overall Trip Reduction

A.1.4 The results of the most recent NTS show a declining trend in travel for all purpose over the most recent 7- year period, as shown below:

Figure A.1 – Number of Trips by Trip Purpose and Year



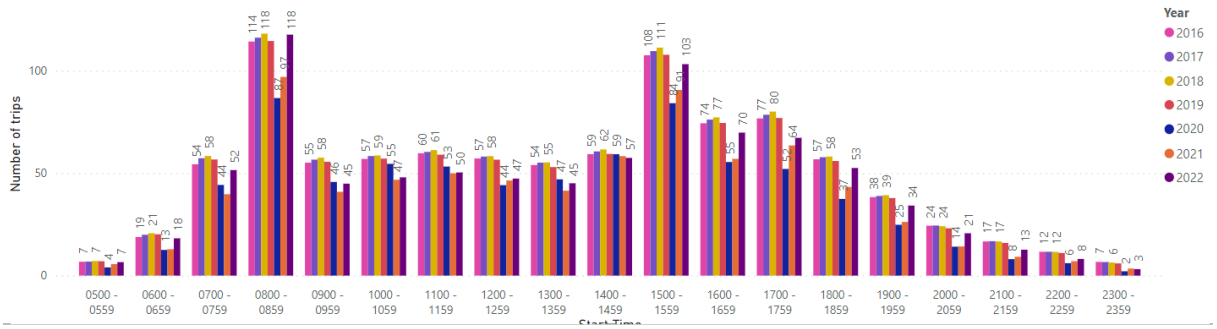
[7] National Travel Survey - GOV.UK (www.gov.uk)

Note: the sharp reduction in the number of trips during 2020 and 2021 is the result of travel restrictions associated with the COVID-19 pandemic, which started on 23rd March 2020 and finished in August 2021.

Reduction in Evening Peak Hour Travel

A.1.5 A review of the NTS start time of trips indicates that people are making fewer trips post COVID-19 pandemic than prior to the pandemic during most periods, except the AM peak hour (08:00 – 09:00) where small or no changes are observed between 2022 data and 2016 - 2019 data. A reduction of between 12% and 16% in trips during the PM peak period (17:00 – 18:00) has been observed when comparing 2022 data with pre-pandemic years 2016 – 2019.

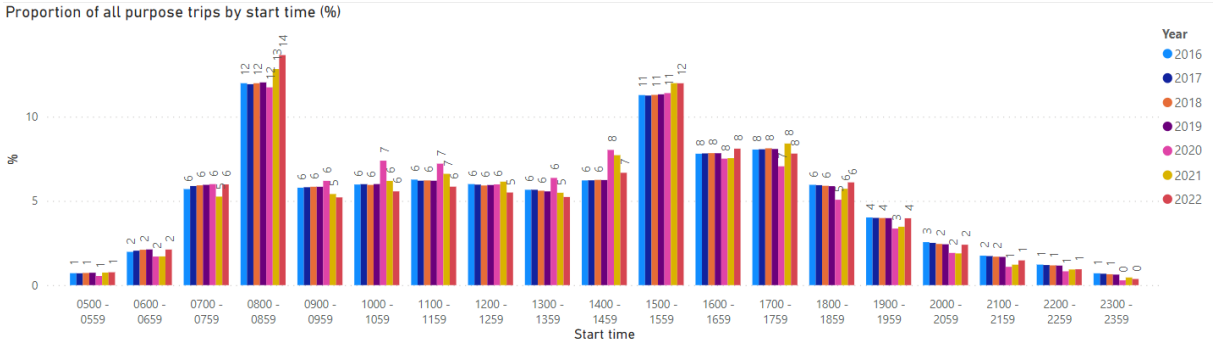
Figure A.2 – Average Number All-Purpose Trips per Person per Year by Start Time



Note: the sharp reduction in the number of trips during 2020 is the result of travel restrictions associated with the COVID-19 pandemic, which started on 23rd March 2020 and finished in August 2021.

A.1.6 The daily profile, however, shows that the proportion of trips across the day (hourly) has remained consistent.

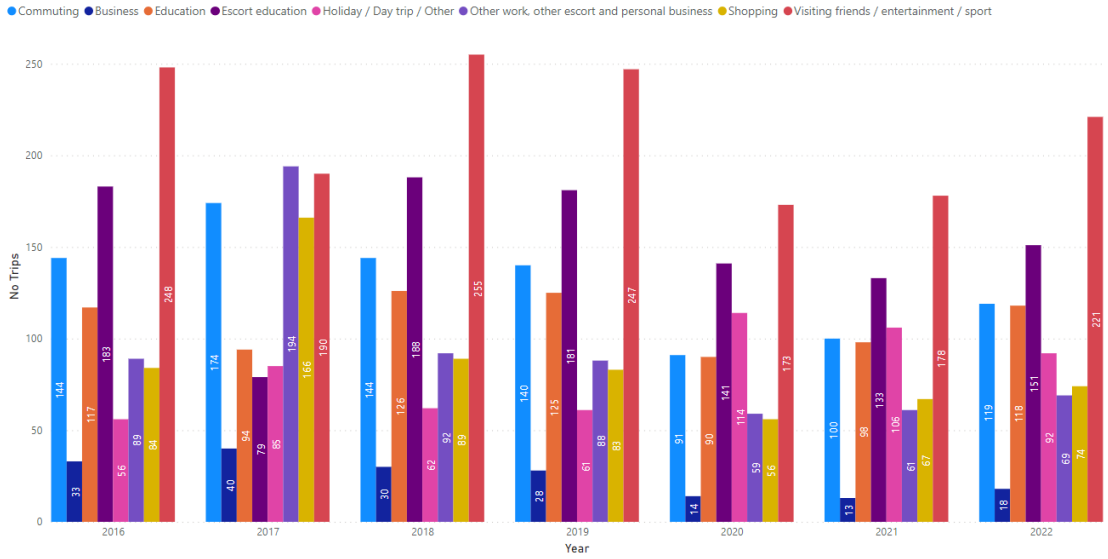
Figure A.3 – Proportion of All-Purpose Trips (%) by Start Time



Reduction in Commuting and Shopping Trips

A.1.7 A review of the number of trips by purpose indicates a reduction in commuting and shopping trips is observed across the 2016 – 2022 period (Note: 2020 and 2021 period should be taken with caution due to anomalies in the data associated with travel restrictions imposed as a result of the COVID-19 pandemic).

Figure A.4 – Average Number of Trips per Person per Year by Purpose



A.1.8 Particularly, the following trends have been observed:

- During the AM peak period, the average number of trips made per person per year with commuting, business shopping and other work, escort and personal business purpose have observed a reduction from pre-pandemic levels.
- During the PM peak period, a reduction in the average number of trips made per person per year has been observed for all purposes except for education and holiday/ day trip/ other purposes.
- Across the day, a reduction in the average number of trips per person per year ranging between -6% and -45% has occurred with the exception of education and holiday/ day trip/ other purpose trips.

Table A.1 – AM, PM and Daily Trip Reduction (%) by Trip Purpose (Pre-Pandemic 2016-2019 to Post Pandemic 2022)

Purpose	AM (08:00 - 09:00)	PM (17:00 - 18:00)	Daily (07:00 - 19:00)
Commuting	-16%	-25%	-21%
Business	-29%	-49%	-45%
Education	4%	14%	2%
Escort education	10%	-5%	-4%
Shopping	-13%	-26%	-30%
Other work, other escort and personal business	-29%	-39%	-40%
Visiting friends / entertainment / sport	17%	-1%	-6%
Holiday / Day trip / Other	64%	25%	39%
All purposes	-2%	-10%	-10%

Physical Activity

A.1.9 People in the UK are around 20% less active now than in the 1960s. If these trends continue, we will be 35% less active by 2030. Regular physical activity can help to prevent and manage over 20 chronic conditions and diseases. Public Heath England has calls for greater communication between the built environment and health professionals to incorporate health needs into the design and planning of infrastructure projects to trigger the development of sustainable communities.

Climate Change Emergency

A.1.10 The Government published in 2021 the 'Decarbonising Transport: A Better, Greener Britain' document, which includes some important priorities:

- Accelerating modal shift to public transport and active transport
- Decarbonising road transport
- Decarbonising how we get our goods
- UK as a hub for green transport technology and innovation
- Place-based solutions to emissions reductions
- Reducing carbon in a global economy

A.1.11 The aim of this national policy is to achieve net zero emissions across every single mode of transport by 2050. This will require significant efforts made by the transport sector, which accounted for 33 per cent of all carbon dioxide emissions in 2018.

The Effects of Smarter Choice Programmes in the Sustainable Travel Towns[8]

A.1.12 Research published by the Department for Transport (DfT) demonstrates that there is a benefit from implementing Travel Plans and sustainable travel measures to achieve a mode shift from car use. Some of the headline results from "The Effects of Smarter Choice Programmes in the Sustainable Travel Towns" report include:

- Car driver trips per resident of the three towns taken together fell by 9% between 2004 and 2008
- Car driver distance per resident fell by 5% to 7% (for trips of 50km or less). Car use per head also fell nationally in comparable (medium-sized) urban areas during this period, but by a much smaller amount: a change of -1.2% for car driver trips and -0.9% for car driver distance)
- Overall reductions in car traffic (based on counts) of the order of 2%, and more substantial reductions in inner areas, of the order of 7 to 8% overall
- Bus use grew substantially in Peterborough and Worcester during the period of the Sustainable Travel Town work, whereas it declined in Darlington. Bus trips per resident

[8] The effects of Smarter Choice programmes in the Sustainable Travel Towns - GOV.UK (www.gov.uk)

of the three towns taken together increased by 10% to 20% (for trips of 50km or over) whereas there was a national decline of bus trips in medium-sized towns of 0.5% over the same period

- There were positive results for cycling in all three towns, with particularly substantial growth in Darlington. Cycle trips per resident of the three towns taken together increased by 26 to 30%, whereas, according to the National Travel Survey, there was a national decline of cycle trips in medium-sized towns over an approximately similar period

- Walking trips by residents grew in all three towns during the period of the Sustainable Travel Town work. Walk trips per resident of the three towns taken together increased by 10% to 13%, whereas, according to the National Travel Survey, there was a national decline in walk trips in medium-sized towns of at least 9% over an approximately similar period

- The growth in bus use, cycling and walking cannot be explained by trip generation. In fact, at the aggregate level, the total number of trips per capita by all modes, as recorded in household surveys, fell by 1.1%

- Although the largest travel behaviour changes were seen in short car driver trips, the largest reductions in distance travelled as a car driver came from medium and longer distance trips. Of the reduction in distance travelled for trips of <50km, about 45% of the reduction in car driver kilometres came from trips of 10 to 50km; about 40% from trips of 3 to 10km; and about 15% from trips of less than 3km. **Table 4.2** shows the car trip reductions by distance from the Sustainable Travel Towns study

Table A.2 - Trip Reductions Applied to District Plan Sites

	Up to 1km	1.1 – 3km	3.1 – 5km	5.1 – 10km	10.1 – 50km	Over 50km	Total
Car Trip Reduction	-22%	-14%	-10%	-6%	-3%	0%	-9%

A.1.13 The above evidence indicates that through a targeted approach to promoting and providing sustainable travel options, a reduction in distance travelled by car can be achieved.

Emergence of New Technologies and Shared Mobility

A.1.14 Technological advances and the emergence of the sharing economy together have the potential to transform the way we travel. The Government is investing heavily in research and development new smart transport models, such as Mobility as a Service (MaaS) and Demand Responsive Transit (DRT), as well as micromobility systems such as bike/e-bike hire schemes and e-scooter trials.

Effect of E-Bikes on Distance Cycled and Mode Share

A.1.15 Research on the effect of e-bikes on bicycle use and mode share[9] has shown that cycling among people with access to an e-bike is likely to drive a mode shift towards cycling. The

[9] Fyhri, A.., Fearnley, N., 2015, Effects of e-bikes on bicycle use and mode share, Transportation Research Part D.

results of the study, which included 1,425 participants who responded to a survey and were willing to take part in an e-bike trial, were as follows:

- Cycling as a share of total distance travelled increased by 20%, on average, as a result of having access to an e-bike;
- The effects of the study were higher on women than men (cycle share increased from 11% to 37% in women, and from 34% to 55% in men, on average); and
- Distance cycled increased more for transport (from 26.5km to 48km weekly, on average), than for exercise (from 13.6km to 20.1km weekly, on average); and
- Distance cycled increased more for non-commuting purpose (from 1.5km to 4.6km daily, on average) than commuting purpose (from 3.3km to 5.7km daily, on average).

APPENDIX B RESEARCH ON INTEGRATED TRANSPORT PLANNING AND PLACEMAKING

B1 RESEARCH ON INTEGRATED TRANSPORT AND PLACEMAKING

Introduction

B.1.1 This chapter sets out some research and guidance integrated transport planning.

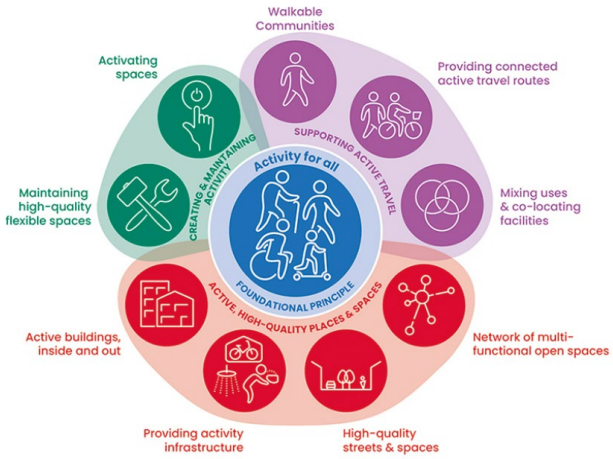
Sport England Active Design (May 2023)

B.1.2 The Active Design Guide seeks to help planners, designers and others involved in placemaking, to create and maintain active environments, which "seek to encourage all physical activity – such as active travel, children's play, outdoor leisure and anything else that maximises opportunities for people to be active, as well as sport and exercise". For Planners and policy makers, the Active Design Guide can be used to develop Local Plan and Neighbourhood Plan policies, and Transport Plans and Local Cycling and Walking Infrastructure Plans (LCWIPs), amongst others.

B.1.3 The Guide applies ten principles, which are illustrated in **Figure B.1**. These principles are split into three areas:

- Supporting Active Travel:
- Active High-Quality Places and Spaces
- Creating and Maintaining Activity

Figure B.1 – Active Design Principles



Decide & Provide (TRICS)

B.1.4 Basford Powers and Sterling Transport Consultancy, in conjunction with UWE (Professor Glenn Lyons) were commissioned to produce a TRICS Guidance Note on the Practical Implementation of the Decide & Provide Approach. The TRICS guidance suggests the following approach:

B.1.5 Understanding the vision for the proposed development: Visioning is central to high quality place-making, creating better places to live, work and play. An upfront, clearly-stated place-making vision is an essential starting point. The following questions should be answered:

i. What sort of place are we creating?

ii. What kind of activities do we need or desire to travel for?

iii. How will we provide for mobility?

iv. Understanding the quantum, scale and mix of the proposed development.

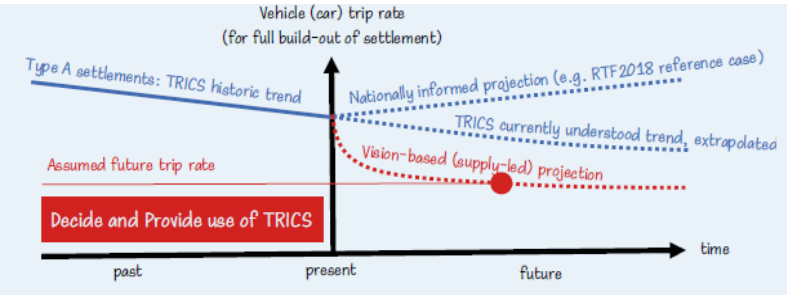
v. Use of historic data.

vi. Use of current TRICS data.

vii. Use of trends for forecasting future trip rates.

viii. Developing the Monitoring and Evaluation Plan (MEP) – the guidance recommends that an MEP is included in the Transport Assessment.

Figure B.2 – Decide & Provide



Source: trics dp guidance_web.pdf.

DfT's Decide & Provide Policy

B.1.6 DfT's 'Strategic Road Network and the delivery of sustainable development' (December 2022) states that:

Para. 15: *"The Transport Decarbonisation Plan and the Future of Freight Plan also recognise that local planning and highway authorities need help when planning for sustainable transport and developing innovative policies to reduce car dependency. This includes moving away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes (vision-led approaches including 'vision and validate,' 'decide and provide' or 'monitor and manage') […]*

Para 48: *"Where a transport assessment is required, this should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision […]"*

Vision & Validate

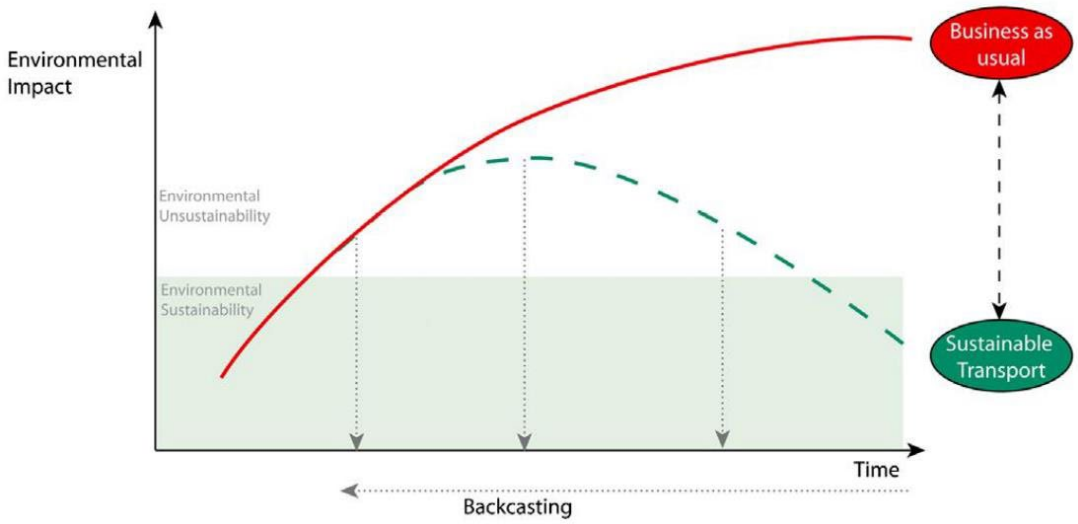
B.1.7 Peter Jones, Professor of Transport and Sustainable Development, University College London prepared a presentation titled 'Transport planning: Turning the process on its head — From 'predict and provide' to 'vision and validate', presented at: Radical Transport Conference.

B.1.8 It highlights that inaccurate forecasting of car ownership and use can lead to major road building and environment and social impacts (predict & provide).

B.1.9 It was proposed that a 'Vision & Validate' approach would help to plan transport to achieve a vision rather than continuing to provide based upon past trends and delivering placing for cars and not people. The Vision & Validate (V&V) approach proposes the development of scenarios based on varying assumptions about changes in drivers of demand, and backcasting techniques (i.e. given a goal or target, how do we get from 'there' back to 'here' through measures to achieve desired behaviour change?). It provides a response to the commonly used Predict & Provide (P&V) approach used since the 1960s, which proposes major road building to avoid extreme congestion and gridlock based on the forecast likely growth in car ownership and use and the inability of existing road networks to cope with the increased demand.

B.1.10 The V&V approach is based around the idea of developing a comprehensive vision of the development and identifying how transport should contribute to deliver this vision, particularly in terms of major investments and other supporting measures (e.g. pricing and regulatory measures). A diagram illustrating the V&V approach is shown below:

Figure B.3 – Vision & Validate Approach



Source: Peter Jones, Professor of Transport

B.1.11 The V&V approach has been endorsed by the Department for Transport (DfT) and used in the development of road traffic scenarios to consider uncertainty and future technological developments. The desirable future for the development ('sustainable transport' in the above figure) is underpinned

Walkable Neighbourhoods – Building in the right places to reduce car dependency (Sustrans, May 2022)

B.1.12 Sustrans has published research which explores the extent to which the proximity of services is used as selection criteria by English local planning authorities when allocating sites for development. The research suggests that accessibility standards should be based on 800m walking and wheeling distances to most key services, and 400m to bus stops. The research also includes examples from practice suggesting that accessibility standards to designated employment areas should be based on 1,600m walking distance.

Transport for New Homes (TNH) 'Building Car Dependency' 2022[10] Report & Recommendations

B.1.13 This report aims to better understand the interplay between transport and planning on a practical basis by visiting new housing and associated development. Key recommendations formulated by TNH following these site visits are:

- Location: new homes need to be built in places which can be served by a modern public transport network and where residents are able to walk or cycle within the development and out of it to the adjacent urban area.
- Design, density and layout of new-builds need to change. The key changes identified by the study are walkability, parking, public transport as a central theme, mixed-development, compactness with more greenery and less tarmac, park and green square provision
- NPPF requires changes: to make it unequivocally clear that building around sustainable transport modes is essential for a low carbon future and healthier and sociable local living.
- Local public transport: funds from roads should be moved to modern public transport networks, and public transport expertise should be brought in early on in the production of local and strategic plans.

Triple Access Planning Research (Glenn Lyons, May 2021) and Application

B.1.14 Glenn Lyons of future mobility at UWE Bristol explains how Triple Access Planning can support the future of mobility. Extracts from the article are provided below:

..... *"Travel is derived from how we design for access and how people wish to, and are able to, fulfil their access needs. 'Changing access' has an important double meaning: the way we are able to reach things we need or desire is changing and can be changed. Motorised travel in future does not necessarily need to continue being as dominant as the derivative of society's pursuit of access."*

..... *"We live in the Triple Access System (TAS), a concept Cody Davidson and [Prof Glenn Lyons] set out in 2016 [see **Figure 6.4**]. The transport system provides access through physical mobility,the land-use system provides access through spatial proximity, and the telecommunications system provides access through digital connectivity."*

[10] Building-Car-Dependency-2022.pdf (transportfornewhomes.org.uk)

..... *"The societal response to Covid-19 has demonstrated – more powerfully than we could have imagined in 2019 – how integral to each of our lives (in different ways) the TAS is. The pandemic has also revealed two key attributes of the TAS: adaptability and resilience. Social inequalities have been further exposed in terms of these attributes and there is an important distinction between being able to and wanting to do things differently. "*

..... *"TAP is outcomes-oriented and therefore vision-led. Actions taken (policy interventions) might be confined, in the case of transport planning and policy, to influencing physical mobility. Nevertheless, these actions should at least take account of influences from, and upon, changing spatial proximity and digital connectivity. Preferably, a more joined up approach would identify in a co-ordinated way actions across all three sub-systems to bring about mutually reinforcing effects to realise economic, environmental and social outcomes."*

"Building upon the use of systems thinking, TAP explores plausible future TAS configurations – i.e. scenarios. This is based on the critical uncertainties of society's relative/absolute change in preference for and consumption of physical mobility, spatial proximity and digital connectivity [see **Figure 8.4**].

Together, such scenarios reflect uncertainty over a 'do nothing' future because the 'triple access policymaker' cannot have full control over shaping the future – some system change (involving multiple other actors) will be out of their hands.

Having determined a preferred accessibility future, 'do something' policy interventions are needed. These must be resilient or adaptive: able to work within the uncertainty of multiple 'do nothing' scenarios to effectively contribute to preferred outcomes."

Figure B.4 – The Triple Access System and Adaptation to COVID-19

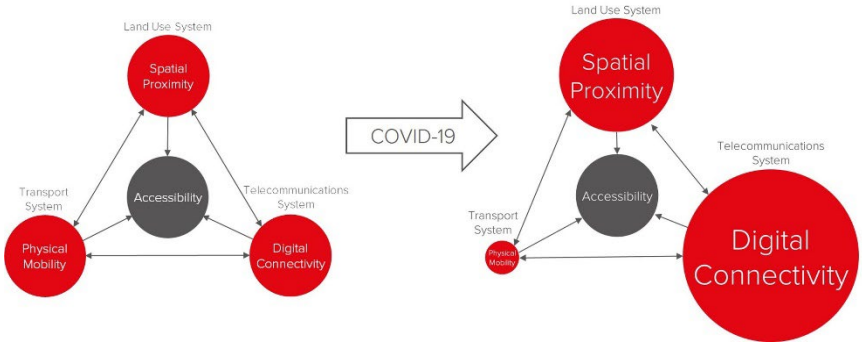
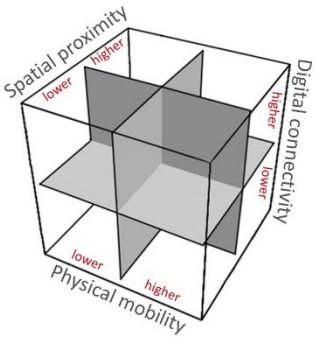


Figure B.5 – Alternative Accessibility Futures



TAS configuration	Physical mobility	Spatial proximity	Digital connectivity
1	↑	↑	↑
2	↑	↑	↓
3	↑	↓	↑
4	↑	↓	↓
5	↓	↓	↓
6	↓	↓	↑
7	↓	↑	↓
8	↓	↑	↑

20-Minute Neighbourhoods Guide (TCPA, March 2021)

B.1.15 The 20-minute neighbourhood is about creating attractive, interesting, safe, walkable environments in which people of all ages and levels of fitness are happy to travel actively for short distances from home to the destinations that they visit and the services they need to use day to day – shopping, school, community and healthcare facilities, places of work, green spaces, and more. These places need to be easily accessible on foot, by cycle or by public transport - and accessible to everyone, whatever their budget or physical ability, without having to use a car.

B.1.16 The 20-minute neighbourhood idea is also about strengthening local economies by keeping jobs and money local and facilitating local food production to create jobs and supply affordable healthy food for all; about empowering communities to have a direct say in how their neighbourhoods change; and about doing all this in ways that create places that meet the needs of the least healthy and the least well-off.

B.1.17 The concept has roots in the Garden City model of development devised in the late 19th century by Ebenezer Howard. The TCPA has distilled Howard's vision into a set of principles, which align with the features of 20-minute neighbourhoods set out in Section 2 of the guide and illustrated in **Figure 8.6**.

Figure B.6 – 20-Minute Neighbourhoods Guide

CIHT Better Planning, Better Transport, Better Places and CIHT Better Fixing a Failing Planning and Transport System

B.1.18 These call for better integrated land use and transport planning to commit to a place-based vision which has sustainable transport as well as health, climate change and environmental needs integrated from the start, to abandon predict and provide models of transport planning, and assess the Local Plan against health and well-being, lifestyle, and environmental criteria (including carbon emissions) and to assess alternative land-use and transport options to define the optimum sustainable transport strategy.

Transport Strategy for the South East

B.1.19 Seeks for more 'planning for people' and more 'planning for places' rather than the traditional approach akin to 'planning for vehicles' with extensive highway capacity enhancements for cars, which is not sustainable in the longer term.

West Sussex Local Transport Plan

B.1.20 The plan states that "*Transport network demand (i.e. usage) changes over time but a 'predict and provide' approach (i.e. building road capacity to cater for forecast traffic growth) could have a negative impact upon other challenges. Use of the transport network and issues that affect transport network performance can contribute to economic performance and environmental issues such as climate change. Parts of West Sussex are also protected for their environmental qualities. Therefore, transport network improvements need to address all of our economic, social and environmental objectives while taking advantage of the opportunities provided by digital infrastructure*".

APPENDIX C BUSINESS AS USUAL

C.1 RESIDENTIAL PEOPLE TRIP GENERATION

C.1.1 The industry standard TRICS database has been interrogated in order to identify comparable surveyed sites and derive trip rates associated to the residential element of the site. The site selection criteria employed to identify similar survey sites is presented below, whilst full TRICS outputs are included in The industry standard TRICS database (version 7.6.3) has been interrogated in order to identify comparable surveyed sites and derive trip rates associated to each land use.

- Land Use: Residential – Mixed private / Affordable housing
- Regions: England (Excluding Greater London)
- Number of dwellings: Sites with 200+ dwellings
- Date range: 01/01/13 – 15/09/21
- Selected days: Weekdays
- Selected locations: Edge of town and Neighbourhood Centre
- Sites with a population within 5 miles of more than 125,000 have been excluded (Burgess Hill has got a population of 30,000).
- Surveys undertaken during the COVID period (March 2020 – May 2021) have been excluded.

C.1.2 A total of 9 survey sites were selected using the above criteria. Residential person trips rates and trips likely to be generated by the proposed residential element of the site are presented below:

Table C.1 – Residential Trip Generation

Time	Person Trip Rate (per dwelling)			Person Trips (1,350 homes)		
	Arr.	Dep.	2-way	Arr.	Dep.	2-way
AM Peak (08:00 - 09:00)	0.206	0.71	0.916	278	959	1,237
PM Peak (17:00-18:00)	0.53	0.287	0.817	716	387	1,103

Residential Trip Purpose

C.1.3 The following table shows a breakdown of residential trips by purpose, based on DfT's National Travel Survey (NTS) statistics. Residential trip purpose has been determined using Table NTS0502 "Trip start time by trip purpose (Monday to Friday only): England, 2022.

C.1.4 The percentage of residential trips with an education purpose has been split between education ages based on the estimated proportion of residents at each age (extracted from QS103UK Age by Single Year Table, Census 2011). The projected share of residential trips by trip purpose is shown below:

Table C.2 – Residential Trip Purpose (NTS0502 2022)

Purpose		AM	PM
Employment		20%	32%
Education	28%	3%	3%
Education Escort	26%	2%	2%
Retail		4%	12%
Other Personal Business and Escort		13%	19%
Visiting Friends / Entertainment / Sport		3%	20%
Holiday / Day Trip / Other		6%	11%
Total		**100%**	**100%**

C.1.5 Based on the above, residential people trips by trip purpose are presented below:

Table C.3 – Residential People Trip Generation (AM Peak)

Purpose		Arr	Dep	2-way	Arr	Dep	2-way
Employment		1%	25%	20%	2	243	244
Education	Nursery	0%	4%	3%	0	34	34
	Primary	0%	13%	10%	0	126	126
	Secondary	0%	14%	11%	0	138	138
	Sixth-form	0%	5%	4%	0	43	43
Education Escort	Nursery	9%	4%	5%	24	36	61
	Primary	33%	14%	18%	91	134	224
	Secondary	5%	2%	3%	15	22	37
	Sixth-form	0%	0%	0%	0	0	0
Retail		8%	3%	4%	22	28	50
Other Personal Business and Escort		25%	9%	13%	71	89	159
Visiting Friends / Entertainment / Sport		7%	2%	3%	19	23	42
Holiday / Day Trip / Other		12%	4%	6%	34	43	77
Total		**100%**	**100%**	**100%**	**278**	**959**	**1,237**

Table C.4 – Residential People Trip Generation (PM Peak)

Purpose		Arr	Dep	2-way	Arr	Dep	2-way
Employment		46%	6%	32%	327	23	350
Education	Nursery	1%	0%	0%	4	0	4
	Primary	2%	0%	1%	14	0	14
	Secondary	2%	0%	1%	16	0	16
	Sixth-form	1%	0%	0%	5	0	5
Education Escort	Nursery	1%	0%	0%	5	0	5
	Primary	3%	0%	2%	18	0	18
	Secondary	0%	0%	0%	3	0	3
	Sixth-form	0%	0%	0%	0	0	0
Retail		9%	18%	12%	63	71	135
Other Personal Business and Escort		14%	29%	19%	98	111	209
Visiting Friends / Entertainment / Sport		14%	30%	20%	104	117	220
Holiday / Day Trip / Other		8%	17%	11%	58	66	124
Total		**100%**	**100%**	**100%**	**716**	**387**	**1,103**

C.2 PEOPLE TRIP INTERNALISATION

C.2.1 The internalisation of residential trips has been calculated for each trip purpose. The assumptions made are:

Employment trip purpose

C.2.2 No internalisation of trips has been assumed.

Table C.5 – Residential (Employment Trip Purpose) Internal / External People Trip Generation

Time	Internal Person Trips			External Person Trips		
	Arr	Dep	2-way	Arr	Dep	2-way
AM Peak (08:00 - 09:00)	0	0	0	2	243	244
PM Peak (17:00-18:00)	0	0	0	327	23	350

Education trip purpose

C.2.3 The internalisation of trips with primary education trip purpose has been based upon the distribution of pupils currently attending schools[11] in and around the area of Burgess Hill, which shows that 86.6% of children attending primary schools are from the local area. No

[11] https://www.locrating.com/school_catchment_areas.aspx?schoolid=urn148753&schooltype=0

internalisation of trips with other education purpose (nursery, secondary, sixth-form) has been assumed.

Table C.6 – Residential (Education Trip Purpose) Internal / External People Trip Generation

Time	Internal Person Trips			External Person Trips		
	Arr	Dep	2-way	Arr	Dep	2-way
AM Peak (08:00 - 09:00)	0	109	109	0	233	233
PM Peak (17:00-18:00)	12	0	12	26	0	26

Education escort trip purpose

6.1.15 The proportion of internal and external trips with education escort trip purpose has been estimated based on the proportion of trips with education purpose. At this stage, it has been assumed that all internal (primary education only) and external trips with education trip purpose will be escorted.

Table C.7 – Residential (Education Escort Trip Purpose) Internal / External People Trip Generation

Time	Internal Person Trips			External Person Trips		
	Arr	Dep	2-way	Arr	Dep	2-way
AM Peak (08:00 - 09:00)	46	68	114	84	124	208
PM Peak (17:00-18:00)	9	0	9	17	0	17

Retail trip purpose

6.1.16 As mentioned above, shops and other retail facilities on site will be designed to cater for everyday needs of residents. As such it is expected that a great proportion of residential trips occurring during peak hours will be internal to the site, a 50% internal / 50% external proportion has been assumed for the purpose of this assessment.

Table C.8 – Residential (Retail Trip Purpose) Internal / External People Trip Generation

Time	Internal Person Trips			External Person Trips		
	Arr	Dep	2-way	Arr	Dep	2-way
AM Peak (08:00 - 09:00)	13	16	29	13	16	29
PM Peak (17:00-18:00)	36	43	78	36	43	78

Other purpose

6.1.17 No internalisation of trips with any of the following trip purposes has been assumed:

- Other personal business / Escort Trip Purpose
- Visiting friends/ Entertainment / Sport Trip Purpose
- Other Trip Purpose

6.1.18 The total residential internal / external people trip generation likely to be generated by the development is presented below:

Table C.9 – Residential (All Trip Purposes) Internal / External People Trip Generation

Time	Internal Person Trips			External Person Trips		
	Arr	Dep	2-way	Arr	Dep	2-way
AM Peak (08:00 - 09:00)	57	191	248	221	768	988
PM Peak (17:00-18:00)	53	36	89	662	352	1,014

C.3 EXTERNAL PEOPLE TRIP DISTRIBUTION

C.3.1 The assessment of external trip distribution has been carried out for each residential trip purpose, the assumptions made are presented below.

Employment / Other Personal Business/ Visiting Friends/ Other Trip Purpose

C.3.2 Residential people trips with an employment trip purpose have been estimated using Census 2011 Travel to Work (TTW) data, using as usual residence an area of Burgess Hill near where the site is located (MSOA Mid Sussex 012).

C.3.3 An adjustment to the TTW distribution has been made to reflect the likely draw of committed and planned employment areas within Burgess Hill located near the site i.e. Science & Technology Park and The Hub. A gravity model has been created using Victoria Business Park as reference, as follows:

Table C.10 – Committed and Planned Employment Areas Gravity Model and Distribution

Employment Area	No jobs	Distance from site (m)	Gravity model	%
Victoria Business Park total	3,865	1,780	8,337	37%
Science & Technology Park	2500	1,640	5,854	26%
The Hub	1500	682	8,446	37%
Total	7,865			

C.3.4 The proportion of trips likely to be generated by the Science & Technology Park and The Hub have been compared against those shown in the TTW data for Victoria Business Park, and added to the residential people trip distribution with employment purpose.

C.3.5 The same distribution has been applied to trips with the following trip purpose, due to the lack of information with regard to these.:

- Other personal business / Escort Trip Purpose
- Visiting friends/ Entertainment / Sport Trip Purpose
- Other Trip Purpose

Education and Education Escort Trip Purpose

C.3.6 A gravity model has been developed to estimate the likely distribution of children residing on site, this has been based on the available schools within the local area around the site

and the capacity of these. The gravity model and distribution of children likely to attend nursery, primary and secondary schools is presented below:

Table C.11 – Residential (Education and Education Escort Trip Purpose) External Trip Distribution

School	Type	Capacity	Distance from site (m)	Gravity Model	%
The Gattons Infant School	Infant (5-7)	269	1700	20	2%
Bolney CofE Primary School	Primary (4-11)	101	5500	26	2%
Twineham CofE Primary School	Primary (4-11)	88	4400	28	2%
Southway Junior School	Primary (7-11)	353	1900	263	23%
St. Wilfrid's Catholic Primary School	Primary (4-11)	418	2800	211	19%
London Meed Community Primary School	Primary (4-11)	391	3800	146	13%
Sheddingdean Community Primary School	Primary (4-11)	190	3000	90	8%
St. Lawrence CofE Primary School	Primary (5-11)	610	3500	247	22%
Burgess Hill Girls	Primary (2-11)	266.5	3600	105	9%
St. Paul's Catholic	Secondary (11-18)	1,123	1,200	1911	65%
The Burgess Hill Academy	Secondary (11-16)	949	3400	434	15%
Burgess Hill Girls	Secondary (11-18)	266.5	3600	105	4%
Dowlands Community School	Secondary (11-16)	1,195	5000	488	17%
Kiddi Caru Day Nursery	Nursery	158	1400	43	64%
Norto5 KIDZ	Nursery	30	2100	5	8%
Tiggywigs Childrens Day Nursery	Nursery	81	2700	11	17%
Mighty Saurus	Nursery	78	3800	8	12%

Retail Trip Purpose

C.3.7 The distribution of external residential people trips with a retail purpose has been carried out based on the MSDC Retail Study[12] carried out in May 2016. The distribution is expected to be as follows:

[12] https://www.midsussex.gov.uk/media/3224/ep40_retailstudy.pdf

Table C.12 – Residential (Retail Trip Purpose) External Trip Distribution

Shopping Area	Adjusted Distribution
Haywards Heath Town Centre	0.3%
Burgess Hill Town Centre	35.3%
Hassocks	0.3%
Burgess Hill other shops	7.4%
Tesco, Jane Murray Way, Burgess Hill	49.0%
Sainsbury's, Bannister Way, Haywards Heath	2.9%
Brighton	2.4%
Crawley	1.7%
Lewes	0.6%

C.4 EXTERNAL PEOPLE TRIP MODE SHARE

C.4.1 The assessment of external trip mode share has been carried out for each residential trip purpose, the assumptions made are presented below.

Employment / Other Personal Business/ Visiting Friends/ Other Trip Purpose

C.4.2 The external trip mode share of residential people trips with an employment trip purpose has been estimated using Census 2011 Travel to Work (TTW) data, using as usual residence an area of Burgess Hill near where the site is located (MSOA Mid Sussex 012).

C.4.3 Mode share associated with the area of Victoria Business Park has been used as the basis to estimate mode share to the Science & Technology Park and The Hub, and adjusted as follows:

- Science & Technology Park: the proportion of car driver trips has been reduced by 33% and assigned to active travel (walking, cycling and wheeling), due to the proximity of this employment area to the site.

- The Hub: the proportion of car driver trips associated with Victoria Business Park has been reduced by 50% and assigned to active travel (walking, cycling and wheeling) due to the proximity of this employment area to the site.

C.4.4 The resulting mode share of residential trips to these employment areas, in comparison with Victoria Business Park, are presented below:

Table C.13 – Residential (Employment Trip Purpose) Mode Share to main employment areas in Burgess Hill

Employment Area	Car Driver	Active Travel	**Other** (incl. car passenger, taxi, other)
Victoria Business Park	49%	44%	7%
Science & Technology Park	33%	62%	5%

The Hub	25%	72%	4%

C.4.5 The same external trip mode share has been applied to trips with the following trip purpose, due to the lack of information with regard to these.:

- Other personal business / Escort Trip Purpose
- Visiting friends/ Entertainment / Sport Trip Purpose
- Other Trip Purpose

Education and Education Escort Trip Purpose

C.4.6 The external trip mode share of residential trips with an education and education escort trip purpose has been estimated using school travel plan information from two schools in the local area: Twineham CofE Primary School, located in a more rural area, and St. Wilfrid's Catholic Primary School, located in Burgess Hill. This is presented below:

Table C.14 – Burgess Hill Schools Mode Share

Mode	Twineham CofE Primary School	St. Wilfrid's Catholic Primary School
Car alone	37%	36%
Car share	48%	0%
Motorcycle	2%	0%
Walk	9%	33%
Cycle	4%	1%
Scoot	0%	3%
Train	0%	0%
Bus	0%	0%
Taxi	0%	0%
Other	0%	27%
Total	100%	100%

C.4.7 The above mode share has been adjusted for each individual school/nursery based on proximity to the site and availability of public transport services. The tables below show the external trip mode share of residential trips to the schools/nurseries that children of the site might attend:

Table C.15 – Residential (Education Trip Purpose) External Trip Mode Share

School/Nursey	**Car Driver**	**Active Travel**	**Public Transport**	**Other** (incl. car passenger, taxi, other)
Kiddi Caru Day Nursery	0%	0%	0%	100%
Norto5 KIDZ	0%	0%	0%	100%
Tiggywigs Childrens Day Nursery	0%	0%	0%	100%
Mighty Saurus	0%	0%	0%	100%
The Gattons Infant School	0%	13%	0%	87%
Bolney CofE Primary School	0%	0%	0%	100%
Twineham CofE Primary School	0%	13%	0%	87%
Southway Junior School	0%	13%	0%	87%
St. Wilfrid's Catholic Primary School	0%	0%	0%	100%
London Meed Community Primary School	0%	0%	0%	100%
Sheddingdean Community Primary School	0%	0%	0%	100%
Burgess Hill Girls (Primary)	0%	0%	0%	100%
Burgess Hill Girls (Secondary)	0%	0%	13%	87%
St. Paul's Catholic	0%	0%	13%	87%
The Burgess Hill Academy	0%	0%	13%	87%
Dowlands Community School	0%	0%	0%	100%
St. Lawrence CofE Primary School	0%	13%	0%	87%

Table C.16 – Residential (Education Escort Trip Purpose) External Trip Mode Share

School	Car Driver	Active Travel	Public Transport	Other (incl. car passenger, taxi, other)
Kiddi Caru Day Nursery	100%	0%	0%	0%
Norto5 KIDZ	100%	0%	0%	0%
Tiggywigs Childrens Day Nursery	100%	0%	0%	0%
Mighty Saurus	100%	0%	0%	0%
The Gattons Infant School	87%	13%	0%	0%
Bolney CofE Primary School	100%	0%	0%	0%
Twineham CofE Primary School	87%	13%	0%	0%
Southway Junior School	87%	13%	0%	0%
St. Wilfrid's Catholic Primary School	100%	0%	0%	0%
London Meed Community Primary School	100%	0%	0%	0%
Sheddingdean Community Primary School	100%	0%	0%	0%
Burgess Hill Girls (Primary)	100%	0%	0%	0%
Burgess Hill Girls (Secondary)	100%	0%	0%	0%
St. Paul's Catholic	0%	0%	0%	0%
The Burgess Hill Academy	100%	0%	0%	0%
Dowlands Community School	100%	0%	0%	0%
St. Lawrence CofE Primary School	87%	13%	0%	0%

Retail Trip Purpose

External residential trips with retail trip purpose have been assumed to all be made by car (either car driver or car passenger, as follows:

Table C.17 – Residential (Education Escort Trip Purpose) External Trip Mode Share

Shopping Area	Car Driver	Car Passenger
Haywards Heath Town Centre	75%	25%
Burgess Hill Town Centre	50%	50%
Hassocks	50%	50%
Burgess Hill other shops	50%	50%
Tesco, Jane Murray Way, Burgess Hill	100%	0
Sainsbury's, Bannister Way, Haywards Heath	100%	0%
Brighton Retail	75%	25%
Crawley Retail	75%	25%
Lewes Retail	75%	25%

Multi-Modal External Residential Trip Generation

6.1.19 The multimodal external trip generation of residential trips is presented below:

Table C.18 – Multi-Modal Trip Generation (BaU)

Time Period	Dir	CD		AT		PT		Other		Total	
		No	%	No	%	No	%	No	%	No	%
AM	Arr	172	78%	29	13%	11	5%	9	4%	221	172
	Dep	369	48%	92	12%	61	8%	238	31%	768	369
	2-W	**543**	**55%**	**119**	**12%**	**79**	**8%**	**247**	**25%**	**988**	**543**
PM	Arr	417	63%	132	20%	60	9%	60	9%	662	417
	Dep	229	65%	70	20%	28	8%	25	7%	352	229
	2-W	**649**	**64%**	**203**	**20%**	**91**	**9%**	**81**	**8%**	**1014**	**649**

APPENDIX D WSCC PREAPPLICATION RESPONSE

WEST SUSSEX COUNTY COUNCIL
PRE-APPLICATION CONSULTATION

TO:	Organisation: FAO: Ridge
FROM:	WSCC - Highway Authority
DATE:	04/06/2024
LOCATION:	Land West of Burgess Hill
SUBJECT:	Internal Reference: PRE-34-24 1350 residential Dwellings, Primary School (2FE & Early Years), Neighbourhood Centre, Community Facilities & Infrastructure with open space
DATE OF SITE VISIT:	Desk Top Study
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	Unknown to date: see comments below

West Sussex County Council (WSCC) has been consulted for pre-application advice regarding the proposed development at Land West of Burgess Hill.

The proposed development is included as a proposed site allocation (DPSC1) in the Draft (Reg. 19) Mid Sussex District Plan which gives an indicative development capacity for the 57.81ha site of 1,350 dwellings, 500m2 retail/community space and 300m2 employment space (Class E).

The following technical information has been provided by the site promoter:

- Transport Scoping Report (TSR)

The TSR sets out the latest design proposals for a development of 1,350 dwellings.

The advice provided below has been prepared by means of a desktop study, using the TSR submitted with this request, in conjunction with other available WSCC map information.

The designs are at a preliminary stage so will be subject to further refinement.

This consultation response sets out the advice provided by WSCC in its role as local Highway Authority. The advice is solely related to the matters addressed in the above TSR.

The applicant is requested to consider and address the following comments and requests for additional information:

General Comments

The location and scale of the proposed development are broadly consistent with the requirements set out in Policy DPSC1 in the Draft (Reg. 19) Mid Sussex District Plan.

Vision

It is clear from the TSR that the development is proposed to be an extension to the existing urban area of Burgess Hill, providing seamless connectivity. Further that awareness of the developments at adjacent sites, (Brookleigh, The Hub, Science & Technology Park and Sayers Common) have been considered as well, which is welcomed.

The relevant policies, plans and strategies have been noted (2.2.1) as well as research on integrated transport and placemaking in Appendix B, with regards to Decide & Provide and Vision & Validate approaches which is welcomed by WSCC, to further inform the vision for the development as well as the following:

- Walking Neighbourhoods – Building in the right places to reduce car dependency (Sustrans, May 2022)
- Transport for New Homes (TNH) 'Building Car Dependency 2022' Report & Recommendations.
- Triple Access Planning Research (Glen Lyons, May 2021) and Application
- 20 -Minute Neighbourhoods Guide (TCPA, March 2021)
- CIHT Better Planning, Better Transport, Better Places and CIHT Fixing a Failing Planning and Transport System
- Transport Strategy for the South East
- West Sussex Transport Plan

Considering the above, it is considered that the vision for the development, as outlined in to the TSR is consistent with the emerging MSDC Local Plan. Further, that it is appropriate for the type of development proposed, as an extension to Burgess Hill.

SITE-SPECIFIC COMMENTS

Committed developments:

No list of committed developments is provided to be considered in reference case forecasting for the TA, however several nearby sites are shown at Figure 1.1 being The Hub, Brookleigh and the Science & Technology Park allocation site. In addition to this, significant residential sites are consented and either fully or partly built out at:

- Fairbridge Way
- Kings Weald (former Tile Works site)
- East of Kings Way

- Stroudley Drive (south of Folders Lane)

The applicants should consider how many dwellings were occupied and how many were yet to be occupied on these sites at the time of their traffic survey base data collection and take these sites into account accordingly in their forecasting.

Note that, although the 2007 WSCC TA guidance is still listed as current on WSCC's website, an update is currently in progress and practise in assessing TA's has necessarily evolved since the issue of the NPPF in 2012 and the multiple subsequent updates to that document. In particular, more officer discretion is allowed in decisions on which junctions should be included in assessments than the 2007 guidance suggests.

1. *The applicant should consider how many dwellings were occupied and how many were yet to be occupied on these sites at the time of their traffic survey base data collection. These should be considering accordingly and referenced in their forecasting.*

Emerging Masterplan

Burgess Hill Place and Connectivity Programme

WSCC notes and welcomes the reference to the Burgess Hill Place and Connectivity Programme, which is being jointly delivered by WSCC and MSDC. The measures being proposed in the TSR should be consistent with and complement the Programme.

Sustainable Transport Strategy

WSCC welcomes the reference to the opportunities to connect the site with the Science & Technology Park, as well as existing public transport services and active travel links in the vicinity. Consideration should be given to extending this approach to the adjacent sites of The Hub, Brookleigh and Sayers Common.

2. *The applicant should consider adopting a similar approach to connecting the site with The Hub, Brookleigh and Sayers Common.*

Active Travel

Proposed Walking and Cycling Routes

WSCC welcomes the commitment for the development to be designed to be compact and walkable with a comprehensive network of high-quality segregated walk and cycle links. Further, that these will connect with existing walking and cycling routes, both on the location of and adjacent to the development, (Figure 3.1. and 4.3.2).

It should be noted that the preferred LCWIP network shown at figure 3.2 is aspirational and there is no funded implementation programme. Use of these or other proposed routes to reach key destinations from the site would need to be predicated on their funding coming from the development.

Consideration should also be given to ensuring that the proposed walking and cycle links as part of the development, connect with the strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park, The Hub and Sayers Common) as identified in Figure's 3.1 and 4.1 in the TSR. Providing a seamless network between the new developments, as well as the wider planned network identified in the Burgess Hill LCWIP, to encourage the greatest number of opportunities for journeys to be undertaken by active travel modes, in and around the town.

Whilst it is the committed aim of both WSCC and MSDC to see all the routes identified in the LCWIP delivered in time, Routes A, E and F should be prioritised, connecting the site with Burgess Hill rail station and Wivelsfield rail station respectively, as they will provide the greatest opportunity to encourage cycle trips between the development, town centre and rail stations. Further, Routes A, E and F would help to enable the proposed cycle hire scheme to be successful, if delivered, preferably in advance of the roll out of the scheme, (see below).

3. *The applicant should ensure that the proposed walking and cycle links in the development, where possible connect with the other strategic sites coming forward, (Brookleigh, Science & Technology Park, The Hub and Sayers Common).*
4. *The applicant should consider prioritising LCWIP Routes A, E and F as these have the potential to encourage local active travel trips to/from the site.*

Public Transport

Bus Services

Existing bus routes Metrobus 273, currently passes close to the site of the development along the A23, operating daily. The proposed development has the potential to increase patronage, however, this should not be at the cost of increasing journey times, which could make the service unattractive to existing passengers, being an inter-urban service. It is noted that in Figure 5.2 in the TSR that Crawley and Brighton are identified as key destinations for residents. However, as listed under the public transport strategy for, (4.3.7) in the TSR, it is proposed only to divert the existing 273 service. No indication is given to enhance the service frequency, to make it a more attractive alternative for future residents of the development to travel to/from Crawley and Brighton. It would be preferable to see the service frequency increased, including the provision of an evening service, to make this a more attractive and viable option, especially for commuters.

Similarly, bus route Compass 100 also passes close to the site of the development along the A2300, currently operating Monday to Saturday. As with the 273 above, the proposed development has potential to increase patronage, however this should not be at the cost of increasing journey times. It should also be noted that route 100 is a service subsidised by WSCC and could change operator when the route is re-tendered. Further, although there are no current plans to change the level of subsidy for the service, this cannot be guaranteed in future. As with route 273, the frequency and hours of operation of route 100 is unlikely to provide a competitive alternative to travelling by private car to Burgess Hill and Horsham. It would be preferable to see the service frequency increased, including the provision of an evening and Sunday service, to make this a more attractive and viable option, especially for commuters.

The proposal to extend Fastway route 20 to Burgess Hill via the development, will require vehicles fitted with guidewheels, to use the Fastway guideway infrastructure in Crawley, but would spend the majority of their journey away from Crawley. Has Metrobus advised regarding if this makes a Fastway service more expensive to provide?

It is noted that Metrobus have indicated that there is potential to extend the route to Burgess Hill town subject to providing bus priority measures. Details of the priority measures would be welcome, including proposed location/s and types of measures.

In addition to the development being served by routes Fastway 20, 100 and 273, consideration should also be given as to how the development could be served by the existing Burgess Hill town network services, as well as anticipated new bus route/s serving the other strategic coming forward, (Brookleigh, Science & Technology Park, The Hub and Sayers Common) as part of a network, rather than independent bus service linkages to each new development site.

The development should be served by a high frequency service from the site to key destinations in the town including the town centre, Burgess Hill and Wivelsfield railway stations. This should include evenings and weekends. The service provision for evenings and weekends should also be clarified, although some of this may be at lower frequency than Monday to Saturday daytimes. There should also be services to or via the employment areas at Brookleigh, The Hub and the Science & Tech Park. There may be issues with diverting and extending existing services, which may be subject to change over coming years, subject to site build out. Whilst this can be included in bus strategy options, the primary links should not be wholly dependent upon this. This is where a network approach, encompassing both existing and future routes, is something that can be developed in partnership with WSCC and bus operators, to ensure any proposed bus services, achieve the greatest impact.

5. *Consideration should be given to enhancing route 273, to increase the frequency, and provide and evening service, in order to make it a more attractive alternative for residents to travel to/from Crawley and Brighton.*

6. *Consideration should be given to enhancing route 100, to increase the frequency, as well as provide an evening and Sunday service, in order to make it a more attractive alternative for residents to travel to/from Burgess Hill and Horsham.*

7. *Has Metrobus advised regarding extending Fastway route 20 will makes it more expensive to provide?*

8. *Can details of the proposed location/s and types of bus priority measures be provided?*

9. *Consideration should be given to utilising existing Burgess Hill town routes to serve the development as well, that all connect with the employment areas at Brookleigh, The Hub and the Science & Tech Park.*

Rail Services

Table 3.2 on frequency of rail services should differentiate between peak and off-peak services. Note in particular that Gatwick Express does not serve Burgess Hill in the off-peak. Brighton services off-peak consist of four Thameslink per hour. Note also that some destinations have additional journey opportunities with a change. For example, to London Victoria, Southern run twice an hour direct, but it is also possible to take Thameslink to change at Haywards Heath onto Gatwick Express twice an hour.

Supporting Measures

Burgess Bikes

Consideration should be given as to the best approach for the introduction and expansion of the proposed cycle hire scheme, in order to ensure the greatest chance of it becoming viable in the longer term. As the proposed development is largely residential and cycle parking will be provided at dwellings, the potential market for a cycle hire scheme is likely to be modest. Figure 4.3 indicates a phasing approach for the implementation of the of the scheme, over a 12-year period, beginning with the development, The Hub, Victoria Business Park and Burgess Hill Station. WSCC has concerns that the relatively long lead time to create a town-wide network, which may also impact on uptake.

WSCC considers that the proposed scheme would have the greatest opportunity of being sustainable in the long term, if it was rolled out across Burgess Hill providing the greatest number of potential users and destinations, from the outset.
Consideration should also be given to collaborating with the developers of the other strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park and The Hub), where possible, to see the scheme rolled out to these locations at the earliest opportunity, to increase take up. Consideration should also be given to extending the area of the proposed scheme to include Sayers Common, to

complement the proposed active travel route, (identified in figure's 3.1 and 4.1) if it includes e-bikes, as this would be considered a reasonable distance.

As referred to above, WSCC considers that the availability of Routes A, E and F identified in the MSDC LCWIP for Burgess Hill would help to enable the success of the cycle hire scheme and should be delivered in advance of the roll out of the scheme.

It is welcomed that it is proposed to site the car club vehicles with the proposed Mobility Hubs, as well as the Shared Mobility App/Mobility as a Service (MaaS), (see below).

Clarification would be welcome with regards to the cycle stands, specifically if it is envisaged if the scheme would use fixed cycle docks, or painted bays, as is common with similar schemes elsewhere.

10. *Consideration should be given to rolling out the cycle hire scheme across Burgess Hill from the outset, to give it the best opportunity of becoming sustainable.*

11. *Can clarification be provided as to what type of cycle stands are likely to be considered?*

Car Club

WSCC welcomes the proposal to introduce a car club in the development, as they provide a viable alternative to car ownership, encouraging sustainable transport modes. Further it is welcomed that it is proposed to site the car club vehicles with the proposed Mobility Hubs, as well as the Shared Mobility App/Mobility as a Service (MaaS), (see below). Whilst no indication is given, it would be preferable if the vehicles used in the scheme are electric cars, as this would help to minimise the environmental impacts of the development.

Consideration should be given to ensure a consistent approach to the introduction and roll out of the car club, with any other similar schemes that may be being proposed at any the other strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park, The Hub and Sayers Common), to ensure compatibility with the proposed Shared Mobility App/Mobility as a Service (MaaS).

12. *Consideration should be given to using electric vehicles for the car club.*

13. *Consideration should be given to ensuring a consistent approach to the introduction and roll out of the car club, with any other similar schemes that may be being proposed at any the other strategic sites planned around Burgess Hill, to ensure compatibility with the proposed Shared Mobility App/Mobility as a Service (MaaS).*

Mobility Hub

WSCC welcomes the proposal to include a mobility hub in the development, bringing together in one central location all the different modes of transport, to encourage residents and visitors to the development to travel sustainably.

As with the proposed car club, consideration should be given to ensure a consistent approach to the design of the mobility hub, with others that may be being proposed at any the other strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park, The Hub and Sayers Common) to ensure compatibility with the proposed Shared Mobility App/Mobility as a Service (MaaS).

14. *Consideration should be given to ensuring a consistent approach to the design of the mobility hub, with any other similar schemes that may be being proposed at any the other strategic sites planned around Burgess Hill, to ensure compatibility with the proposed Shared Mobility App/Mobility as a Service (MaaS).*

Shared Mobility App/Mobility as a Service (MaaS).

WSCC welcomes the proposal to include, MaaS via means of a shared mobility app as way to encourage the take up and use of shared and sustainable transport modes. More details on the proposed shared mobility app would be welcome, to understand the scope of the app, functions and options, given the technical challenges in setting up and ongoing operations of the types of service usually associated with MaaS.

A number of existing MaaS schemes are cited in the TSR, as such it would be helpful to understand if the developer has had any initial discussions, with existing MaaS providers as to potential options. Similarly, to understand, if there have been any initial discussions with potential operators, to understand likely interest from them in participating in a Burgess Hill MaaS scheme.

It is noted that these MaaS schemes encompass geographical areas much larger than Burgess Hill and the immediate wider area of the town, it would be helpful to understand if the proposed MaaS scheme is intended to be rolled out further in the future.

As with the proposed car club, and mobility hub, consideration should be given to ensure a consistent approach to the design of the shared mobility app/approach to MaaS with any other similar MaaS schemes that may be being proposed at the other strategic sites planned around Burgess Hill, (Brookleigh, Science & Technology Park, The Hub and Sayers Common).

15. *Can more details be provided on the scope, functions, and options of the proposed shared mobility app.*

16. *Have any discussions taken place with existing MaaS providers and likely mobility operators who would be anticipated in a Burgess Hill MaaS scheme?*

17. *Is it the developers intension to see the Shared Mobility App/Mobility as a Service (MaaS) scheme extended beyond the wider Burgess Hill area?*

18. *Consideration should be given to ensuring a consistent approach to the introduction of the Shared Mobility App/Mobility as a Service (MaaS) scheme with any other similar schemes that may be being proposed at any the other strategic sites planned around Burgess Hill, to ensure compatibility with the proposed car club and mobility hub.*

Vehicular Access Strategy

Provision of a highway access for the site for general private motor traffic to reach the A273 and Malthouse Lane, other than for the smaller portion of the site, which is located to the east of Malthouse Lane, has the potential to worsen the congestion impact to the A273/B2116 Stonepound Crossroads, which is an air quality management area. The Transport Assessment should consider closely how the propensity of vehicles to route via the A273 London Road and Brighton Road through this junction can be minimised and also how the effects of such traffic impacts to the local population such as through severance or emissions can be effectively mitigated given the site constraints.

The principle of the bus gates, as identified in Figure 4.2 is supported, including them being located on new links, noting that TRO's for bus gates have no guarantee of being successful, but this is less of a risk on new links than existing roads.

19. *The Transport Assessment should consider closely how the propensity of vehicles to route via the A273 London Road and Brighton Road through this junction can be minimised and also how the effects of such traffic impacts to the local population such as through severance or emissions can be effectively mitigated given the site constraints.*

20. *The developer should be mindful that whilst supported in principle, the TRO's for the proposed bus gates are subject to approval.*

Trip Generation

Note that although site surveys from March 2020 to May 2021 are excluded due to Covid travel restrictions, peak traffic patterns remained lower across the remainder of 2021 and recovered gradually across 2022, settling down more from Spring 2023.

The TRICS multi-modal trip rate calculator for the residential mixed private/affordable land use and applied appropriate site filtering, similar to those used in this assessment. It has not been possible to reproduce the total vehicles generations of 0.430 two in AM and 0.436 two-way in PM shown at Appendix C. Trip rates obtained have been generally around 0.52 two-way in each peak, with some filtering tweaks resulting in higher rates. It is not clear which site selection is affecting the average, either downward in the summary provided or upward in the selections made at WSCC.

Trip Distribution

It is noted that the journey to work patterns from the 2011 census are to be adjusted use of a gravity model based on the Victoria Business Park in respect of new employment sites at The Hub and Science & Technology Park. This should also apply to employment provided in Brookleigh.

Information should also be provided on how this travel to work relates to the overall travel to work to all destinations, to demonstrate that the gravity model is proportionately applied against the residual census journey to work movements to existing destinations not included in the gravity model, including Haywards Heath, Brighton & Hove, Crawley, Gatwick Airport and London.

It is presumed that the plots of person trip distribution at figures 5.1 to 5.5 are by all modes but this should be clarified.

Mode Shares

WSCC notes that the success of the trip reduction strategy requires car trip reductions of 25% for specific corridors although the overall reductions to all destinations are rather lower. This will require high frequency and high-quality services on those corridors, in order to achieve the ambitious target for car trip reductions.

21. *Consideration should be given to type of alternative transport modes, frequency and design standards that will be required to realistically achieve car trip reductions of 25% for the relevant corridors.*

Methodology

There is advantage to using the Mid Sussex Strategic Model for compatibility with the Local Plan tests undertaken by MSDC and their consultant Systra, for Local Plan evidence. However, this is not essential as the strategic model is primarily a highway assignment model, so some work outside the model will nonetheless be required to evidence the sustainable transport modes trips.

Monitoring and Evaluation

The proposed monitoring and evaluation plan is welcomed. This will need to specify the forms of monitoring to be undertaken, the locations and methodology as well as the frequency of monitoring surveys. This will need demonstrate how this informs the delivery of the transport strategy for the development, including the arrangements and formats for reporting of monitoring data.

22. *Consideration needs to be given as to how the MEP will inform the delivery of the transport strategy for the development, including the arrangements and formats for reporting of the monitoring data.*

General Advice

The Highway Authority would require the following documents to be submitted as part of any future application:

- A site location plan scale (1:1250) with site boundary indicated.
- Schedule of existing uses including planning history with reference numbers.
- Description, including site layout plans, of the proposed development and schedule of uses.
- Summary of reasons supporting the site access/highways works proposals, including plan (scale 1:250 or similar) with achievable visibility splays indicated.
- Design Audit of any proposed highway works, including plan identified departures from standards.
- Final Stage 1 Road Safety Audit (RSA) of the site access and any proposed highway works, **with the Road Safety Audit Response Report (RSARR) in Microsoft WORD format for the LHA to edit as Overseeing Organisation**, including any amended plans.
- A Transport Assessment, including location plan of key services, availability of sustainable modes of transport and existing/future vehicular generation.
- Reference to supporting national, regional, and local planning documents and policies.
- Parking strategy, including provision of parking for all modes of transport
- Relevant data collected to date.
- Proposed trip rates supported with TRICS outputs and site selection methodology.
- Junction capacity assessment in accordance with the WSCC Transport Assessment Methodology.

Provided below, some standard guidance relating to road design and current standards:

Manual for Streets (MfS) for lightly trafficked residential streets:

http://www2.dft.gov.uk/pgr/sustainable/manforstreets/pdfmanforstreets.pdf

Design Manual for Roads and Bridges (DMRB) for all other roads, including rural roads. DMRB supplementary documents CD 109 (Search for "CD 109"):

https://standardsforhighways.co.uk/dmrb/

WSCC supports the approach set out in MFS, which has been adopted guidance for residential street design since its introduction in 2007. Within this document there are some very useful references to visibility splays, turning circles and car parking layouts. The document does not however provide specific measurements for visibility splays, so:

"X "Distances from the (kerb back) are typically:

- 2.4 metres - for domestic single access points and shared or busy crossovers (this may be reduced to 2.0 metres in certain circumstances in consultation with the Local Highways Authority and subject to local context)
- 4.5 metres - for busy junctions
- 9.0 metres -major junctions

"Y "Distances are based on vehicle speed, and for lightly trafficked residential streets MFS would be applied:

- 20 mph - 25 metres
- 25 mph - 33 metres
- 30 mph - 43 metres

For a road where the 85th percentile speed is in excess of 39 mph and for roads where MFS does not apply, CD 109 distances from DMRB would be applied:

- 40 mph -120 metres
- 50 mph -160 metres
- 60 mph -215 metres

The West Sussex Local Design Guide provides further advice on how MfS is to be interpreted and applied within West Sussex.

The 'Additional Information' section of the WSCC Pre-application advice for roads and transport webpage provides a range of additional advice and guidance which you may find useful in preparing your application. Please click the link below and navigate to the 'Additional Information' section.

https://www.westsussex.gov.uk/roads-and-travel/information-for-developers/pre-application-advice-for-roads-and-transport

Here you will be able to access our Local Design Guide which provides further advice on how MfS is to be interpreted and applied within West Sussex.

Parking.

For applications within Arun, Crawley and South Downs National Park any parking provision should be provided in line with the Planning Authorities adopted Supplementary Planning Guidance (SPG) which will set out parking standards for development in these areas. These contain the recommended levels for cycle parking and also guidance on levels of Electric Vehicle charging points for new developments.

Arun:
https://www.arun.gov.uk/supplementary-planning-documents-spds/

Crawley
https://crawley.gov.uk/planning/planning-policy/local-plan/supplementary-planning-documents/urban-design-spd

South Downs National Park
https://www.southdowns.gov.uk/planning-policy/supplementary-planning-documents/

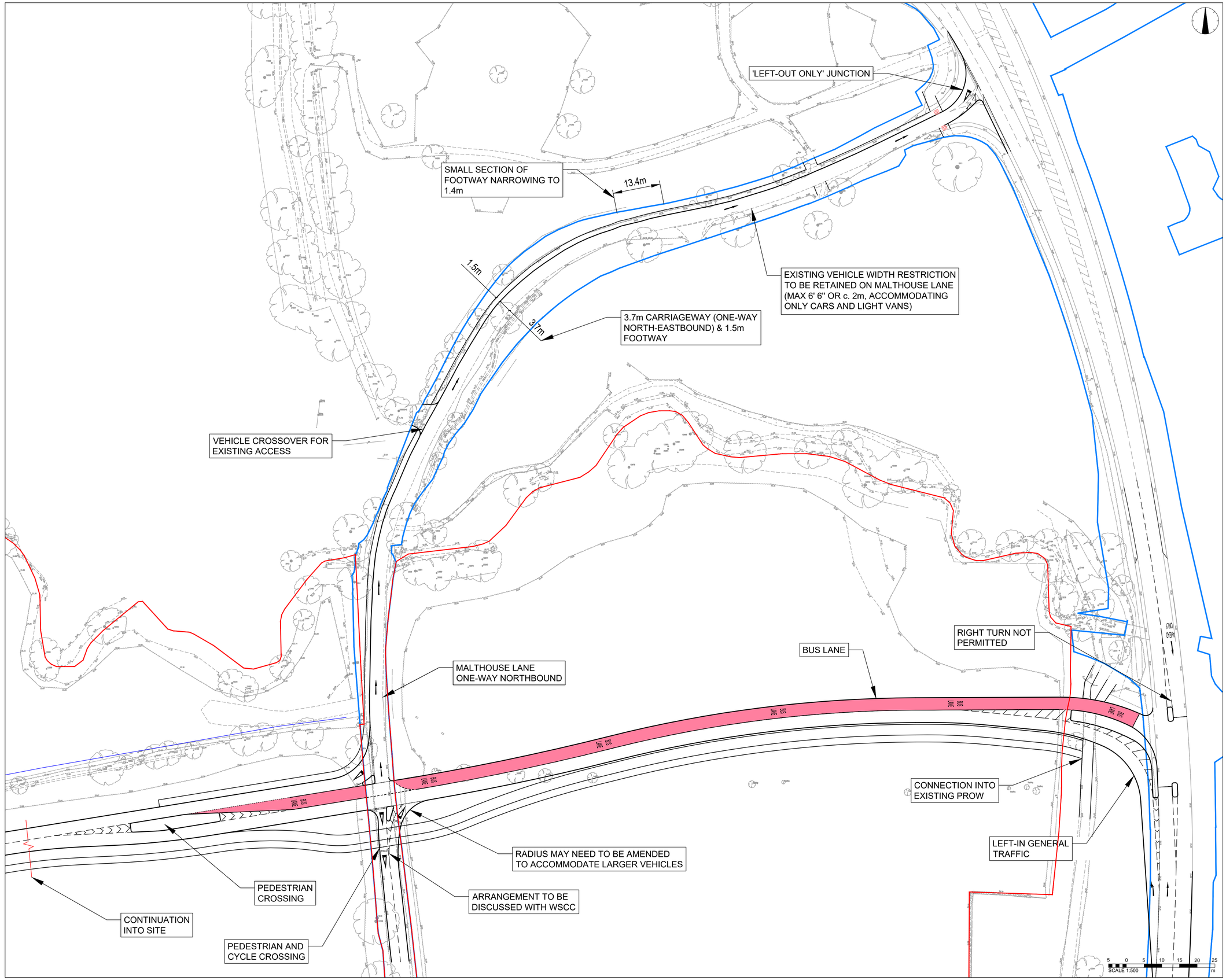
For all other areas West Sussex County Councils latest parking standards which we adopted in August 2019 as Supplementary Planning Guidance (SPG) should be used. This can be found at the link below under the 'Additional Information' section.

https://www.westsussex.gov.uk/roads-and-travel/information-for-developers/pre-application-advice-for-roads-and-transport

Please note that any advice given by council officers for pre-application enquiries does not constitute a formal response or decision of the council with regard to the granting of planning permission in the future. Any views or opinions expressed are given in good faith, and to the best of ability, without prejudice to the formal consideration of any application, which will be the subject of public consultation and ultimately decided by the Local Planning Authority.

Daniel Washington
Transport Planning & Policy Team

APPENDIX E POSSIBLE BUS PRIORITY IMPROVEMENTS



DRAWING NOTES:

KEY:

- REDLINE BOUNDARY
- HIGHWAY BOUNDARY
- EXISTING MALTHOUSE LANE KERBLINE

NOTES:

- MALTHOUSE LANE TO BE CONVERTED TO ONE-WAY FOR VEHICLES IN THE NORTH-EASTBOUND DIRECTION
- SOUTHERN/EASTERN KERBLINE TO BE RETAINED - ONE-WAY VEHICULAR CARRIAGEWAY TO BE 3.7m TO ACCOMMODATE EMERGENCY ACCESS
- PROPOSED FOOTWAY TO BE CREATED ON NORTHERN/WESTERN SIDE OF CARRIDGWAY WITH WIDTH OF 1.5m (EXCLUDING WHERE SHOWN).
- MALTHOUSE LANE WIDENING DOES NOT EXCEED 0.5m OFFSET FROM EXISTING NORTHERN/WESTERN KERBLINE
- JUNCTION WITH MALTHOUSE LANE IS DESIGNED TO 40mph, ASSUMING SPEED LIMIT IS REDUCED FROM NATIONAL SPEED LIMIT (60mph) AS PART OF THE JUNCTION PROPOSALS
- MALTHOUSE LANE SPEED LIMIT REDUCED FROM NATIONAL SPEED LIMIT (60mph) TO 30mph ALONG THE ONE-WAY SECTION WHERE THE CHARACTER OF THE ROAD HAS BEEN SIGNIFICANTLY ALTERED
- INPUT IS REQUIRED FROM DESIGN TEAM WITH REGARDS TO CONSTRAINTS
- TRAFFIC SURVEYS FOR VOLUMES AND SPEEDS SHOULD BE CARRIED OUT TO INFORM:
  - VISIBILITY REQUIREMENTS
  - JUNCTION CAPACITY ASSESSMENTS (NOT CARRIED OUT)
- CONSULTATION IS NECESSARY WITH WSCC
- INTERNAL ROADS ARE INDICATIVE (AND WILL BE INFLUENCED BY MASTERPLAN DEVELOPMENT)

REV	DESCRIPTION	DATE	BY	CHKD
P03	UPDATED REDLINE BOUNDARY	17-07-24	BH	MMG
P02	UPDATES TO ACCESS STRATEGY	10-01-24	MH	SM
P01	FIRST ISSUE	27-06-23	BH	SM

ORIGINATOR:

RIDGE

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088
WWW.RIDGE.CO.UK

CLIENT:

THAKEHAM

IN ASSOCIATION WITH:

PROJECT:

LAND WEST OF BURGESS HILL

TITLE:

EASTERN STRATEGY ACCESS

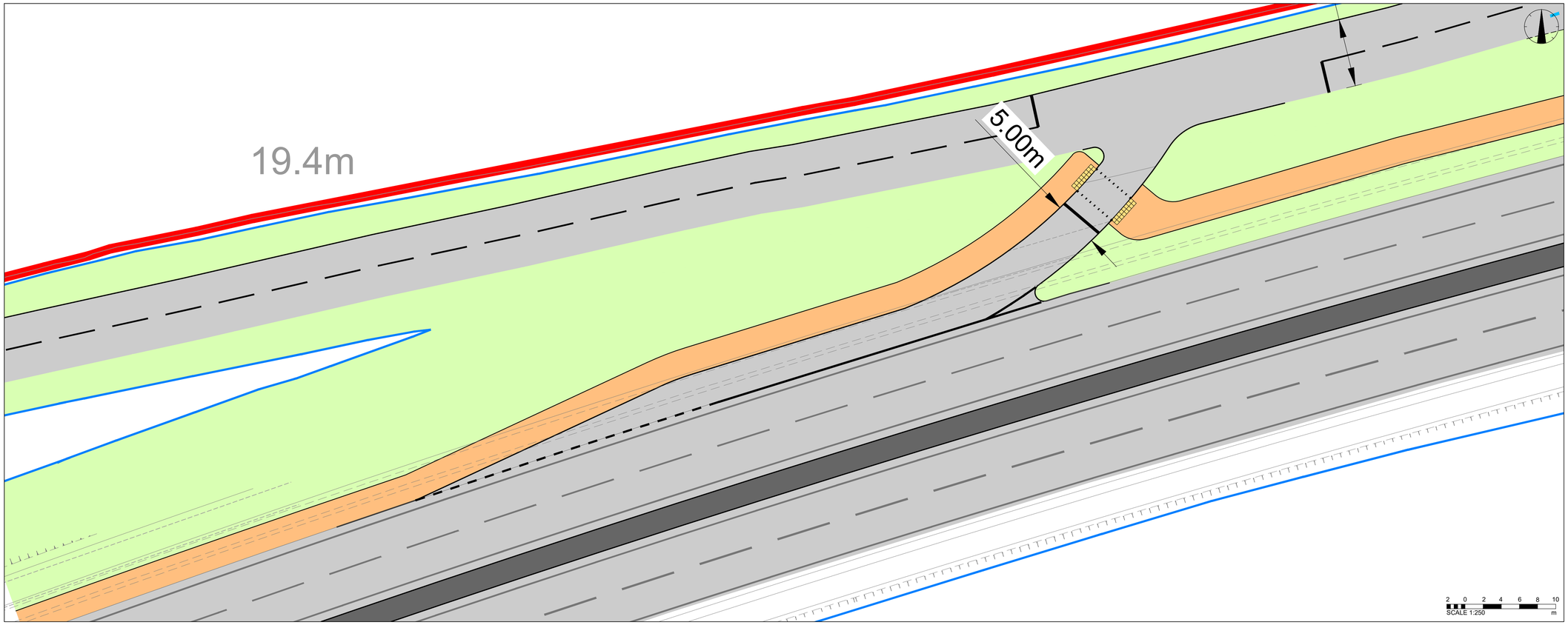
ENG/TECH:	CSE:	ICSE:	SCALE:	1:500 @ A1
BH	SM	SM	STATUS ISSUE:	FOR INFO

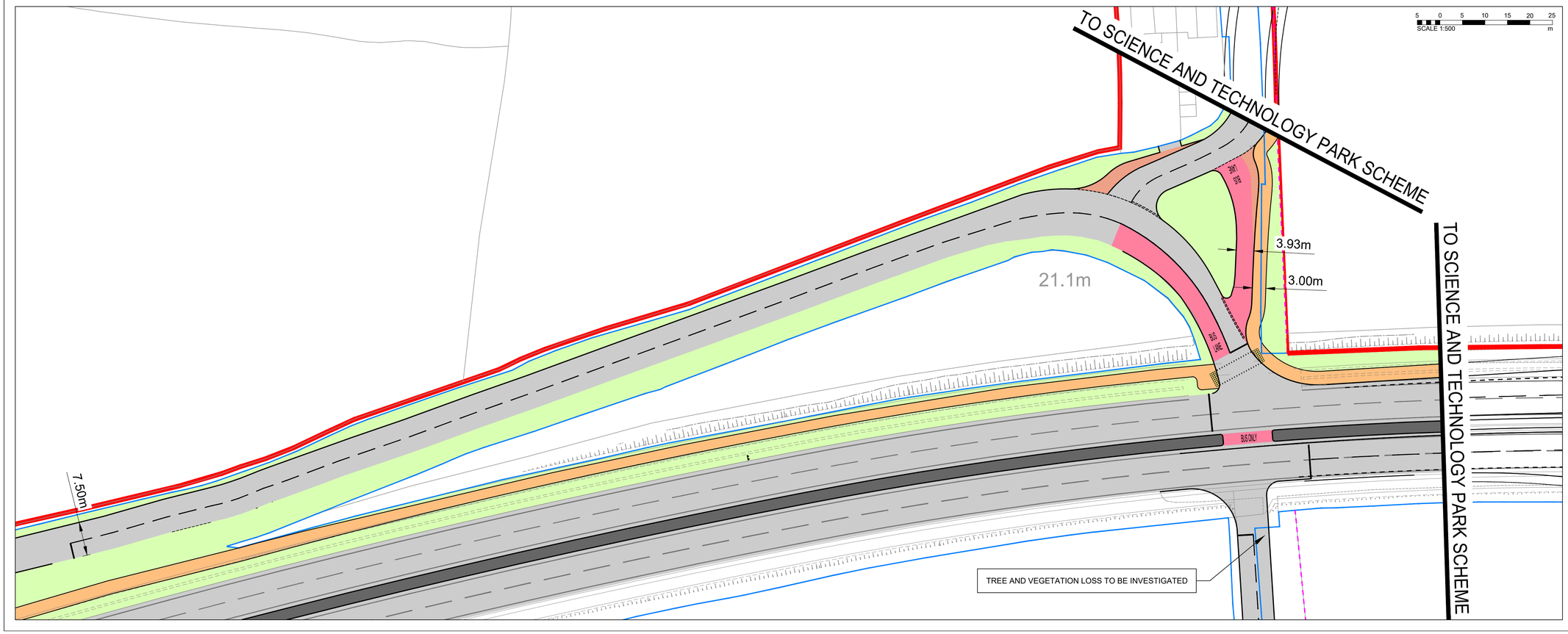
STATUS: INFORMATION

UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

ISO 19650 STATUS:

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5020385	RDG	XX	XX	DR	H	0006	P03





DRAWING NOTES:

KEY:

- REDLINE BOUNDARY
- ADOPTED HIGHWAY BOUNDARY
- UNREGISTERED LAND BOUNDARY
- CARRIAGEWAY
- SHARED PEDESTRIAN / CYCLE ROUTE
- VERGE
- EXISTING TRAFFIC ISLAND
- PROPOSED BUS LANE

REV	DESCRIPTION	DATE	BY	CHKD
P01	FIRST ISSUE	2024-05-10	MH	SM

ORIGINATOR:

RIDGE

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088
WWW.RIDGE.CO.UK

CLIENT:

THAKEHAM

IN ASSOCIATION WITH:

PROJECT:
WESTERN ARC
(LAND WEST OF BURGESS HILL)

TITLE:
PROPOSED A2300 / JOB'S LANE
BUS GATE ARRANGEMENT

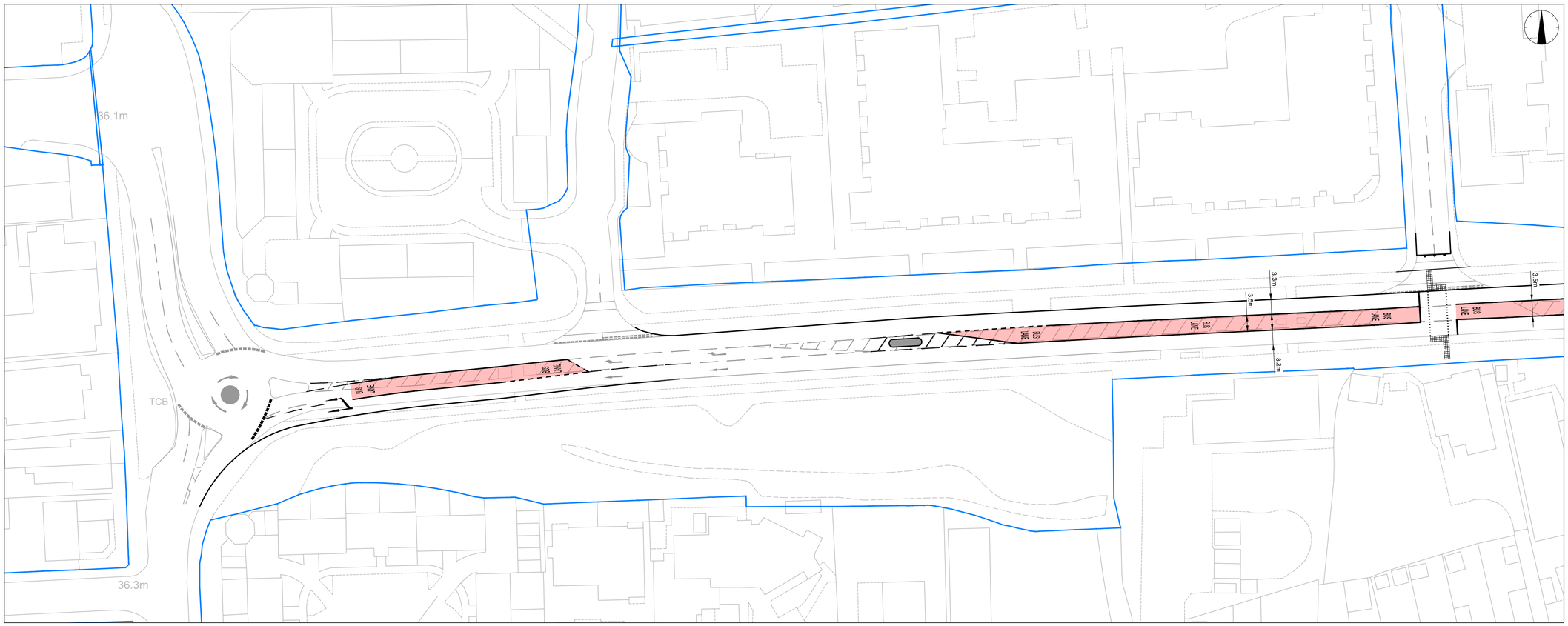
ENG/TECH:	CSE:	ICSE:	SCALE: AS SHOWN @ A1
MH	SM	SM	STATUS ISSUE: FOR INFO

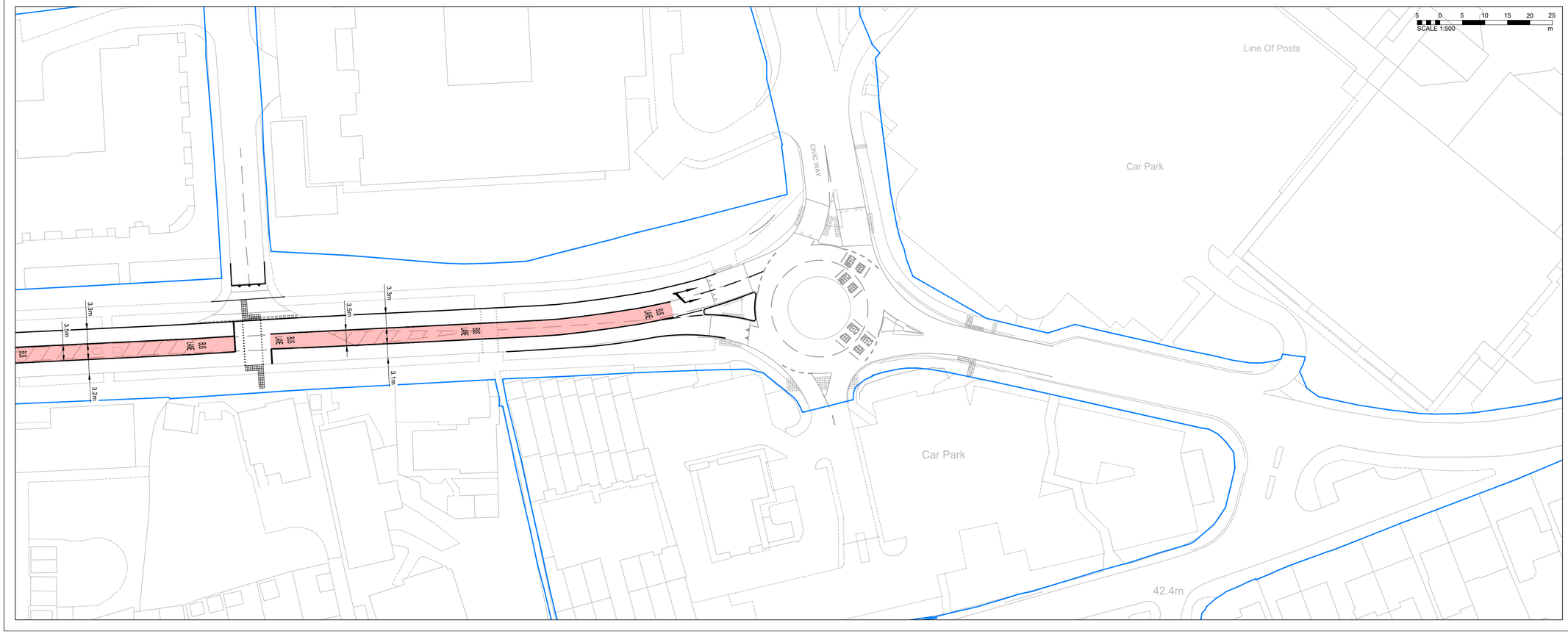
STATUS: INFORMATION

UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

ISO 19650 STATUS:

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5020385	RDG	XX	XX	DR	H	0010	P01





DISCLAIMER NOTES:

- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL
- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
- THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATORS INFORMATION BEING ALTERED BY OTHERS
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORKS
- THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT
- THE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY", INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ORIGINATOR. THOSE RELYING ON THE "RECORD" OR "AS BUILT" DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

KEY:

- ADOPTED HIGHWAY BOUNDARY
- PROPOSED TRAFFIC ISLAND
- PROPOSED BUS LANE

REV	DESCRIPTION	DATE	BY	CHKD
P01	FIRST ISSUE	2024-05-28	MH	SM

ORIGINATOR:

RIDGE

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088

WWW.RIDGE.CO.UK

CLIENT:

THAKEHAM

IN ASSOCIATION WITH:

PROJECT:

WESTERN ARC
(LAND WEST OF BURGESS HILL)

TITLE:

POSSIBLE BUS PRIORITY ARRANGEMENT ALONG QUEEN ELIZABETH AVENUE

ENG/TECH:	CSE:	ICSE:	SCALE:	@
MH	SM	SM	1:500	A1

STATUS ISSUE: FOR INFO

STATUS: INFORMATION

UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

ISO 19650 STATUS:

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5020385	RDG	XX	XX	DR	H	0012	P01

APPENDIX F GATEHOUSE LANE POSSIBLE IMPROVEMENTS

BISHOPSTONE LANE

CUCKFIELD ROAD

VEHICLE CROSSOVER

VEHICLE TURNING HEAD

2m FOOTWAY FROM ROUNDABOUT TO PUBLIC HOUSE

GATEHOUSE LANE

WALK AND CYCLE ROUTE TO THE HUB, BUS STOPS ON A2300 AND FUTURE SCIENCE & TECHNOLOGY PARK

SHARED FOOTWAY AND CYCLEWAY

HIGH HATCH LANE QUIET ROUTE (CONNECTING DEVELOPMENT TO PUBLIC HOUSE)

CONNECTION INTO MASTERPLAN

CONNECTION INTO MASTERPLAN

CONNECTION INTO MASTERPLAN

FOR CONTINUATION SEE 5020385-RDG-XX-XX-DR-H-0014

-10 0 10 20 30 40 50

SCALE 1:1000 m

KEY:

- REDLINE BOUNDARY
- HIGHWAY BOUNDARY
- CARRIAGEWAY
- SHARED FOOT AND CYCLEWAY
- VERGE

REV	DESCRIPTION	DATE	BY	CHKD
P01	FIRST ISSUE	24-09-16	MH	SM

ORIGINATOR:

RIDGE

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088

WWW.RIDGE.CO.UK

CLIENT:

THAKEHAM

IN ASSOCIATION WITH:

PROJECT:

LAND WEST OF BURGESS HILL

TITLE:

NORTH-EAST ACCESS STRATEGY
SHEET 1 OF 2

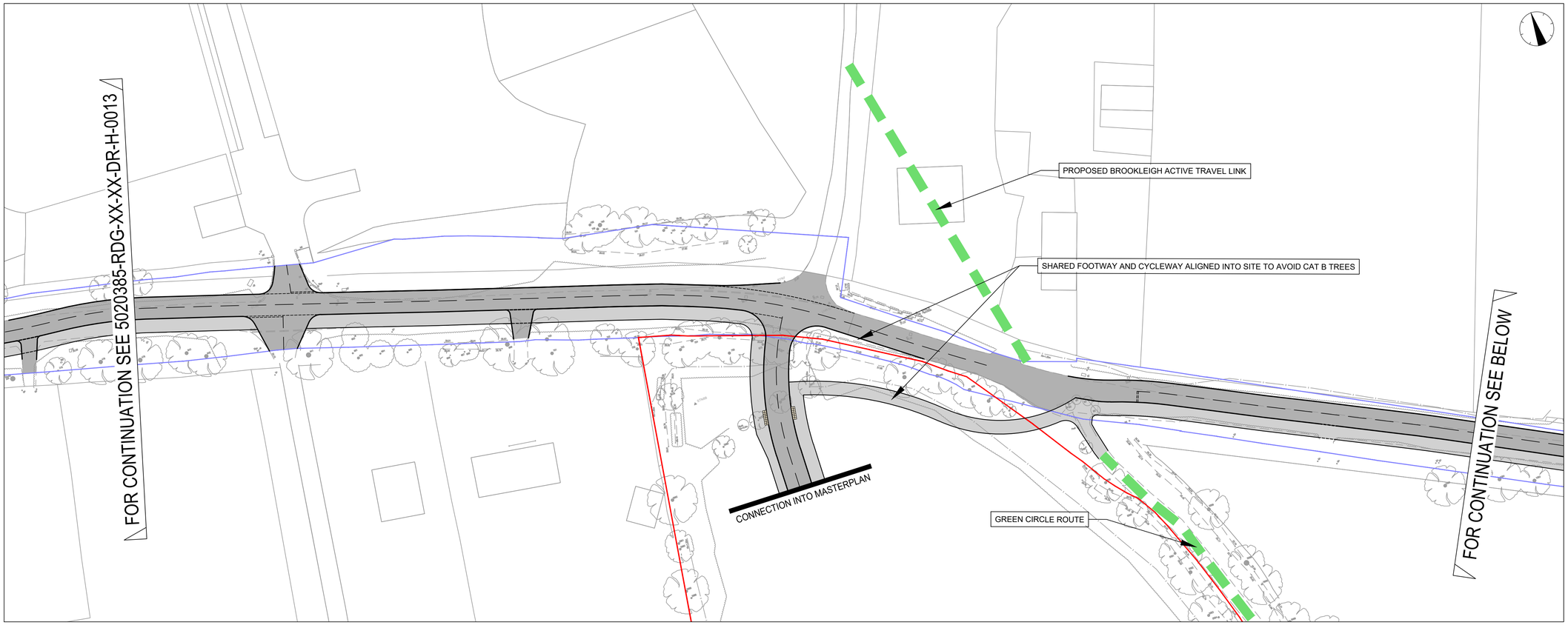
ENG/TECH:	CSE:	ICSE:	SCALE: 1:1000 @ A1
MH	SM	SM	STATUS ISSUE: FOR INFO

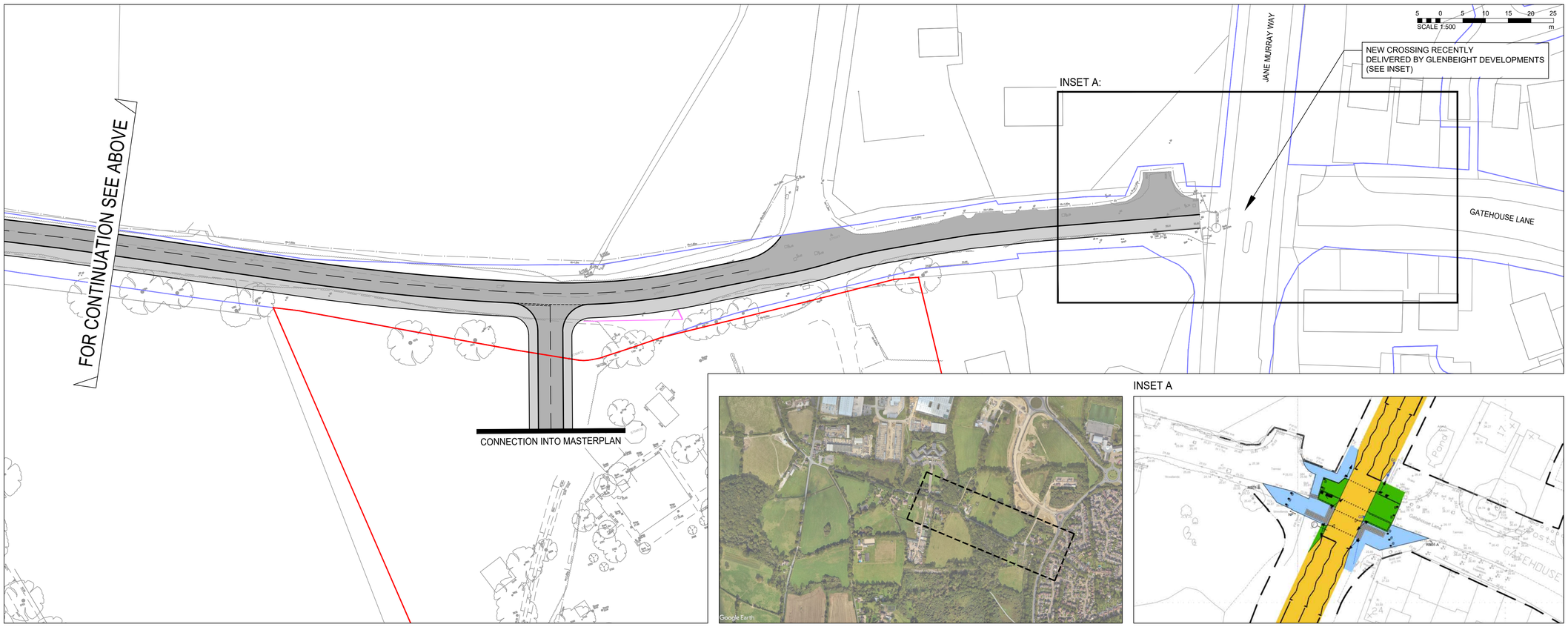
STATUS: INFORMATION

UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

ISO 19650
STATUS:

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5020385	RDG	XX	XX	DR	H	0013	P01





INSET A

DISCLAIMER NOTES:

- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL
- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
- THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATORS INFORMATION BEING ALTERED BY OTHERS
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORKS
- THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT
- THE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY", INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ORIGINATOR. THOSE RELYING ON THE "RECORD" OR "AS BUILT" DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

KEY:

- REDLINE BOUNDARY
- HIGHWAY BOUNDARY
- CARRIAGEWAY
- SHARED FOOT AND CYCLEWAY
- VERGE

REV	DESCRIPTION	DATE	BY	CHKD
P01	FIRST ISSUE	24-09-16	MH	SM

ORIGINATOR:

RIDGE

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL
TEL: 0118 932 3088
WWW.RIDGE.CO.UK

CLIENT:

THAKEHAM

IN ASSOCIATION WITH:

PROJECT:

LAND WEST OF BURGESS HILL

TITLE:

NORTH-EAST ACCESS STRATEGY
SHEET 2 OF 2

ENG/TECH:	CSE:	ICSE:	SCALE: 1:500 @ A1
MH	SM	SM	STATUS ISSUE: FOR INFO

STATUS: INFORMATION

UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

ISO 19650 STATUS:

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5020385	RDG	XX	XX	DR	H	0014	P01